DEEP WATER AND SHOAL

In the Indian Ocean

DEEP WATER AND SHOAL

by WILLIAM ALBERT ROBINSON

With an Introduction by WESTON MARTYR

THE TRAVEL BOOK CLUB
LONDON, W.C.2

特别得到"海头" 海绵 网络马克 FIRST PUBLISHED BY JONATHAN CAPE

1932

THIS EDITION 1939

PRINTED IN GREAT BRITAIN IN THE CITY OF OXFORD AT THE ALDEN PRESS PAPER BY SPALDING & HODGE LTD.

INTRODUCTION

I have been asked to introduce Mr. William Robinson's book to British readers; but I hesitate to do so, because I remember it is the fate of the majority of British readers to have to catch the 9.15 three hundred times each year, and I think this book will make every season-ticket holder who reads it very restless and discontented with his life. However, the present reader has probably looked at Mr. Robinson's alluring illustrations already and consequently nothing I can say will prevent his reading the letterpress. Read on, then. Your blood be on your own head. But remember — I have warned you!

And, after all, the Author himself had to catch the 9.15 for ten years running. At least, he thought he had to catch it. And then, one day, he saw a great light, and he let the 9.15 steam off without him. He refused to make that journey any more. Instead he made another. He bought a tiny boat and sailed her all around this world. It took him three and a half years and cost him every cent of his money. It cost him in all £1000, but it will surprise me if he regrets it. For he has seen the Works of the Lord and His Wonders in the Deep. He has 'passed manye landes and many yles and countrees, and cherched many full straunge places'. He has listened to the trade-wind singing in his rigging and heard the beat of the Angel Azrael's wings. He has basked in the tropic sunshine and the shadow of death has chilled his bones. He has talked with kings and walked with captains and dined (once) with cannibals on human flesh. He has been stalked by waterspouts and hunted by dragons - or at any rate, by dragon-lizards. He has seen submarine volcanoes belching smoke from the sea and also

FIRST PUBLISHED BY JONATHAN CAPE 1932

THIS EDITION 1939

PRINTED IN GREAT BRITAIN IN THE CITY OF OXFORD

AT THE ALDEN PRESS
PAPER BY SPALDING & HODGE LTD.

INTRODUCTION

I have been asked to introduce Mr. William Robinson's book to British readers; but I hesitate to do so, because I remember it is the fate of the majority of British readers to have to catch the 9.15 three hundred times each year, and I think this book will make every season-ticket holder who reads it very restless and discontented with his life. However, the present reader has probably looked at Mr. Robinson's alluring illustrations already and consequently nothing I can say will prevent his reading the letterpress. Read on, then. Your blood be on your own head. But remember — I have warned you!

And, after all, the Author himself had to catch the 9.15 for ten years running. At least, he thought he had to catch it. And then, one day, he saw a great light, and he let the 9.15 steam off without him. He refused to make that journey any more. Instead he made another. He bought a tiny boat and sailed her all around this world. It took him three and a half years and cost him every cent of his money. It cost him in all £1000, but it will surprise me if he regrets it. For he has seen the Works of the Lord and His Wonders in the Deep. He has 'passed manye landes and many yles and countrees, and cherched many full straunge places'. He has listened to the trade-wind singing in his rigging and heard the beat of the Angel Azrael's wings. He has basked in the tropic sunshine and the shadow of death has chilled his bones. He has talked with kings and walked with captains and dined (once) with cannibals on human flesh. He has been stalked by waterspouts and hunted by dragons - or at any rate, by dragon-lizards. He has seen submarine volcanoes belching smoke from the sea and also

a Ford car scrambling along the tiny beach of a lost and lonely South Sea atoll. He has even been captured and held to ransom by an Arab sheikh. And once he met a man with a wife, and a daughter older than his wife, and a grand-daughter older than either! Need I say more? Now, all this seems dirt cheap at £1000. And nothing can rob Mr. Robinson of his memories.

You will probably find it hard to believe a deal of this book. I should not be surprised if you found the whole story incredible. And so it is. But it all happened. It is true. In introducing his book, I have to go bail for the author. And I do this with complete confidence. The things he says he did and saw and heard, I know he did do and see and hear. I can vouch for that, although I was not with him. But I have been there or thereabouts, too. Mr. Robinson writes about those things which it is my livelihood to write about and I am naturally jealous of any man who invades my field. If I could trip him up over his facts or catch him painting in the wrong shade of local colour, you can be sure I would give him away every time. But he gives me no chance. He knows too well what he is talking about. His facts are authentic and his work is sincere. In this it is quite unlike a number of sensational books on the sea and on wild and little-known parts of the earth which have been foisted on the public as veracious autobiographies during the last few years. Two of these books actually became best-sellers, although the alleged 'facts' they contained were laughably inaccurate to anyone familiar with the places and conditions described. Now I notice that the general public, which does not like being fooled, has become healthily suspicious of such books of late and refuses to buy them any more. Which is all to the good; but it would be a pity and also unjust if Mr. Robinson's book suffered on this account, and it is for this reason I emphasize and vouch for its sincerity and truth.

Mr. Robinson belies his name; he is a most uncommon sort of man. He wanted to see the world, so he hoisted himself out of his rut and saw the world. He could by no means afford to do this; but he did it just the same. He formed the opinion that any small boat, be she properly designed, built, rigged and handled, could be sailed anywhere in safety, and he backed his opinion by buying a little boat no longer than a Thames punt and sailing her safely all round the Earth. He enjoyed himself enormously, and he saw and did some very strange and interesting things, as I have already hinted. They are all to be read of in this book, so I will not enlarge upon them. As the author describes them they are as large as life, for, besides being a man of action, he is an artist. He can write. A man who describes the delicious sensation of sailing before the wind, day after day, through the serene weather of the North East trade region as: 'Rolling along over the sea with the swing of a poem' - well, he can write. And when a man like that sees something new, interesting, queer or beautiful during most of his waking hours for three and a half years, he gathers a considerable wealth of material worth writing about. The result is a BOOK.

The conclusions the author draws from the facts he observed are always interesting. His conclusions, however, are quite his own affair. Some of them, notably his scathing condemnation of some South Sea Missionaries he met, are likely to cause him a deal of troublesome correspondence. For the author is quite fearless; he makes definite accusations and names names. 'The Mission of the Sacred Heart of Jesus Christ, Limited' of New Guinea, for instance. What is the purpose of this Institution? Does it exist as a cure of souls, or for the curing of copra? The author gives us his conclusions; but we ought to hear what the other side has to say before coming to any conclusion ourselves.

Mr. Robinson, as he deserved to be, was lucky. He was

a Ford car scrambling along the tiny beach of a lost and lonely South Sea atoll. He has even been captured and held to ransom by an Arab sheikh. And once he met a man with a wife, and a daughter older than his wife, and a grand-daughter older than either! Need I say more? Now, all this seems dirt cheap at £1000. And nothing can rob Mr. Robinson of his memories.

You will probably find it hard to believe a deal of this book. I should not be surprised if you found the whole story incredible. And so it is. But it all happened. It is true. In introducing his book, I have to go bail for the author. And I do this with complete confidence. The things he says he did and saw and heard, I know he did do and see and hear. I can vouch for that, although I was not with him. But I have been there or thereabouts, too. Mr. Robinson writes about those things which it is my livelihood to write about and I am naturally jealous of any man who invades my field. If I could trip him up over his facts or catch him painting in the wrong shade of local colour, you can be sure I would give him away every time. But he gives me no chance. He knows too well what he is talking about. His facts are authentic and his work is sincere. In · this it is quite unlike a number of sensational books on the sea and on wild and little-known parts of the earth which have been foisted on the public as veracious autobiographies during the last few years. Two of these books actually became best-sellers, although the alleged 'facts' they contained were laughably inaccurate to anyone familiar with the places and conditions described. Now I notice that the general public, which does not like being fooled, has become healthily suspicious of such books of late and refuses to buy them any more. Which is all to the good; but it would be a pity and also unjust if Mr. Robinson's book suffered on this account, and it is for this reason I emphasize and vouch for its sincerity and truth.

Mr. Robinson belies his name; he is a most uncommon sort of man. He wanted to see the world, so he hoisted himself out of his rut and saw the world. He could by no means afford to do this; but he did it just the same. He formed the opinion that any small boat, be she properly designed, built, rigged and handled, could be sailed anywhere in safety, and he backed his opinion by buying a little boat no longer than a Thames punt and sailing her safely all round the Earth. He enjoyed himself enormously, and he saw and did some very strange and interesting things, as I have already hinted. They are all to be read of in this book, so I will not enlarge upon them. As the author describes them they are as large as life, for, besides being a man of action, he is an artist. He can write. A man who describes the delicious sensation of sailing before the wind, day after day, through the serene weather of the North East trade region as: 'Rolling along over the sea with the swing of a poem? - well, he can write. And when a man like that sees something new, interesting, queer or beautiful during most of his waking hours for three and a half years, he gathers a considerable wealth of material worth writing about. The result is a BOOK.

The conclusions the author draws from the facts he observed are always interesting. His conclusions, however, are quite his own affair. Some of them, notably his scathing condemnation of some South Sea Missionaries he met, are likely to cause him a deal of troublesome correspondence. For the author is quite fearless; he makes definite accusations and names names. 'The Mission of the Sacred Heart of Jesus Christ, Limited' of New Guinea, for instance. What is the purpose of this Institution? Does it exist as a cure of souls, or for the curing of copra? The author gives us his conclusions; but we ought to hear what the other side has to say before coming to any conclusion ourselves.

Mr. Robinson, as he deserved to be, was lucky. He was

extremely lucky in his boat. She is a remarkable little thing. She is the shortest vessel that has ever sailed around this world; but all the same all brands of weather seem to have been alike to her. She weathered various gales in perfect safety - and in comparative comfort, too, which is more unusual. She was easy on her gear and on her men, and she was very fast indeed for her size. She made one passage of 1282 miles in nine days, an average of over 142, and her owner must have driven her hard and continuously to make her do that. He once got 190 miles out of her in 24 hours, which is an astounding feat for a boat only 27 ft. 6 in. on the waterline. And when I say astounding I mean astounding. I know what I am talking about. I once sailed across the Atlantic and back again in a boat nearly twice as long as the Svaap. Our boat was famous for her speed and we had a good strong crew to drive her, but only once during the 80 days that voyage lasted were we able to make her sail as many as 190 miles from noon to noon. You may take it from me, the Svaap must be a grand little boat and her owner must be a fine seaman.

The author was also very, very lucky in his shipmate. Etera was a Polynesian, a native of Tahiti. When asked how long it would take him to get ready to sail around the world he said 'five minutes'. And he was as good as his word. Unlike most Polynesians, who are tall and handsome, Etera was an ugly little man only five feet high. He did not however, allow these disabilities to cramp his style. He proved himself to be a real sailor. He produced good meals under the most difficult conditions. He never got rattled. And he smiled most of the time. Now these things may not sound impressive to those who have not made a long passage in a little boat; but those who have been through it know only too well what extremely rare birds real small-boat seamen are. And as for the man who can go on producing good hot meals out of very limited materials, with inade-

quate tools, in a battened-down, stifling galley on a tiny stove in violent motion, he is as precious as rubies and infinitely more rare. And only those who have been through it all can realize the difficulty; the practical impossibility, of living cheek by jowl with another man for long periods, under trying conditions, in a cramped confined space from which there is no escape. Friction and quarrels are the inevitable result — and it is a wonder to me that a further result is not more often bloody murder. Now Etera and Robinson went through hell together for prolonged periods, several times, and they remained good friends through everything, right up to their journey's end. This speaks volumes for both men's characters; but only the small-boat ocean sailor will understand the magnitude of this miracle. It is true Etera got drunk and was jailed in most of the ports Svaap touched at. In this he was the traditional, old-fashioned salt. He did not, however, keep a wife in every port as the old salts did. He kept several — even in ports he had never heard of before. In spite of all this I mean to shanghai Etera when I start on my next voyage. He is a pearl without price.

Early on in his book the author points out that 'one cannot know the sea from steamships'. He is right. The steamship passenger is, in truth, removed very far from reality. He is protected from reality and deliberately insulated from nature. The insulation provided nowadays is pretty effective too. One might be living in an hotel ashore when at sea in a modern liner. They keep the sea in its place there, and even the winds of heaven are held at a safe distance by plate glass windows all round the decks. Fortunately no adequate insulation against sea-sickness has been evolved yet, so that even the incumbents of cabins de luxe are still brought into occasional touch with at any rate one phenomenon of nature.

To be insulated from nature to the extent which now

rules in highly civilized communities is to live an artificial life, an unnatural life, a false life. It is a safe life and a soft life — and a life so damnably dull that it is not worth living. That is the feeling that overtakes men like the author — and makes them miss the 9.15 one fine day. They take their bowler hats and stamp on them, kick the remains out-o'-window and sack the boss. Then they take their lives in one hand and the whole round world in the other — and live.

Having said which, I find I cannot round off this introduction in the properly pompous traditional manner. To tell you the truth, I have just been taking another look at that photograph entitled 'Before the NE. Trades', not to mention that other one of the 'Golden Skinned Kitavans'. And I feel a sudden urge, which is not to be denied, to savage my bowler hat and clear out and blow the consequences and *live* again, too, for a change.

So all I have time to add is this: Do not, for heaven's sake, take the slightest notice of my first cautionary paragraph. No. Read what this man Robinson did, and then, by Gum!

go thou and do likewise!

WESTON MARTYR.

London, 17th July, 1932.

LIST OF ILLUSTRATIONS

IN THE INDIAN OCEAN	Frontispicce
MAP OF ROUTE	facing page 30
CABIN OF THE SVAAP	36
A CORAL ISLAND	96
THE SVAAP IN TAHITI	96
A STREAM IN TAHITI	112
ETERA'S CONQUESTS	112
ETERA	144
IN THE INTERIOR OF NEW GUINEA	168
A NEW HEBRIDES CHIEF AND HIS WIFE	168
A NEW GUINEA SORCERER WITH A CEREMONIAL	SEAT AND
DRUMS	216
GOLDEN SKINNED KITAVANS CAME TO BEG TOBA	ACCO 216
A SEPIK RIVER NATIVE SHOWING KELOIDS	240
HEAD-HUNTERS AT INITIATION CEREMONY	240
A BALINESE MARKET	256
A SEPIK HEAD-HUNTER	. 256
WILLIAM ALBERT ROBINSON	272
A LITTLE BALINESE DANCER	272
'BY APPOINTMENT'	288
MAKALLA	304
'I FOUND A BLOOD-LETTER PLYING HIS TRADE'	304
CAPTURED AT LITH BY THE ARABS	312
WELCOMED AT EL WEJ BY ORDER OF THE KING	OF THE
HEJAZ .	312
NERO'S CANAL	320
BEFORE THE NE. TRADES	332
NEW YORK	336
SAIL PLAN OF SVAAP	353

At the end of the book will be found a plan of the Svaap

DEEP WATER AND SHOAL

PROLOGUE

We set sail from New York on the evening of June 23rd, 1928, pointing the bow of our tiny ketch-rigged yacht southward for Bermuda. I took a last look at the rapidly disappearing shore line of North America, which I was destined not to see again for forty-two months. Suddenly I realized that I was in for it—that I was irrevocably started on my ambitious plan to live out my dreams of sailing around the world in my own boat in search of remote islands, strange peoples, and the beauty of new landfalls.

I was only twenty-five, and most of the money I had saved had gone to buy Svaap* and her equipment. There was enough left for a few months, but after that? ... Perhaps I could make enough from my writing to carry on. If not, I'd have to earn it in some other way, but carry on I would, sailing new seas, far from hampering schedules or itineraries, leading the life I love. I hoped to study, write, explore, do a bit of research, but always enjoy the never-ending adventure with just enough uncertainty to flavour it.

No one, not even my family, knew what I planned to do. I had a dread of starting something I might not be able to finish. There are few things so pitiful as those projects — so numerous recently — which commence in a blaze of glory, only to fizzle out shortly afterwards.

And so we headed for Bermuda on what was to be a trial voyage. Should *Svaap* prove her worth as a sea boat, and I my ability as a navigator, we would carry on as planned.

A finer test of both man and boat could not have been

^{* &#}x27;Svaap' means 'dream' in Sanskrit.

devised. Four hundred miles east of Cape Hatteras we met with one of the greatest storms I have ever seen. It was a strange jest of Fate that we should experience such weather at the very beginning, when we were untried, and relatively inexperienced, but it was a splendid object-lesson.

The gale swept down, driving appalling hurricane seas before it. Amazed by the fury and the beauty of it we rode to a sea anchor—a large conical bag that acts as a drag in the water to keep the bow facing the storm. We used oil on the waters to reduce somewhat the breaking seas.

For a week we rode it out beneath that ominous North Atlantic sky with its leaden racing clouds. At first I hardly believed that Svaap could perform the impossible, and conquer those thundering avalanches that menaced her. From one roaring crest we could see the horizon on all sides—horizon of jagged peaks and valleys. Then we would topple over and rush sickeningly down into the pit. At the last moment, when it seemed as if Svaap would keep on going downward and bury herself deep under the next mountain of destruction, she would point her bowsprit at the sky and lift like a gull. Only the muttering crests swept over the sturdy little ship. Each time she fought her way to the top my confidence grew, and in the end I knew that she would be equal to anything she might meet, and that my faith in her had been deserved.

We made a perfect landfall on St. David's Head, Bermuda, on July 5th, twelve days out. My navigation—acquired evenings at the New York Public Library—had

proved as successful as my ship.

The friends who accompanied me had returned to college, and I chose a Bermuda boy, Willoughby Wright, to be my crew. As it happened, life in the South Seas was too much for poor Bill, and he left me in Tahiti. There, in that lovely voluptuous mid-Pacific isle, I was to find

20

Etera, a golden-skinned South Sea Islander who became a real Man-Friday and remained as my solitary crew to the very end of the voyage.

Soon we were fitted and provisioned for the run down through the West Indies to Panama, where I felt the real

voyage would commence.

Now began my real training in handling Svaap in nearly all the varieties of weather that we were to meet during our three years in the tropics. On the 2000 mile voyage to Panama, during which we stopped only in Haiti and Jamaica, we went through a complete course in diagnosing approaching squalls or local storms, and perfected ourselves in the art of reducing sail to the proper extent at the proper moment.

I began to feel more of a permanence about things and settled comfortably into the routine.

I was beginning to know my ship.

At 2.30 on the afternoon of August the 12th we anchored at Cristobal, the eastern entrance to the Panama Canal. We delayed our passage through the Canal to make a trip to the San Blas coast. My stay among the San Blas Indians serves as an example of the advantage of sailing without schedule. Had I been following a definite itinerary I would have missed one of the most delightful months of my life. That month, however, holds a story of its own; what matters here is the *cayuca* or native dugout canoe which I brought back from the San Blas Indians. Previous to her stay among them *Svaap* had been dependent upon shore boats, having no tender of her own.

A ship so small can hardly carry a lifeboat on deck—there is no room; and if anything happens at sea you are just out of luck. She can, however, carry some sort of small boat sufficient to get ashore in when in port, and I found

the cayuca to be satisfactory. It was light, could easily be pulled on deck, and fitted comfortably alongside the cabin house without taking too much room.

We used a cayuca as tender on the entire voyage.

Returning to Panama, we were given the freedom of the port by Port Captain Kidd, and every possible assistance by the Panama Canal authorities.

Admeasurer Frederick Williams applied a great deal of higher mathematics to Svaap and arrived at the conclusion that she was ten tons net, which meant that at the rate of 75 cents a ton we would pay \$7.50 plus a measurement fee of \$5.00 to go through the Canal. This was the total charge, pilot included, for putting the boat through the greatest canal in the world.

At the end of the voyage I paid \$28 to go through a few miles of the most miserable canal on earth - the privately owned Delaware-Raritan Canal, connecting Delaware Bay with New York. There is something to be said for govern-

ment ownership after all.

I spent two days at the Hydrographic Office at Cristobal equipping Svaap with charts, sailing directions, light lists, etc., sufficient to take her around the world. I had definitely decided that she was capable of going anywhere, and that I would seriously undertake the realization of my dream. Previously there had always been some uncertainty in my mind, but now I began to see quite clearly what the future held for me. I had at last developed complete confidence in myself and in my ship, and with that confidence no barrier was too great.

The real voyage now lay ahead, beckoning us on,

I consulted Captain Kidd and arranged to start from the Atlantic end on the evening of September the 14th. We would transit the Gatun locks by night, and the Pedro Miguel and Miraflores locks at the other end by day.

I had hoped to be allowed through without a pilot, but Captain Kidd stood by his decision, and accordingly we waited at the Strangers Club that afternoon for Pilot Thompson who had been appointed. He arrived a little after six, quite amused at the size of Svaap, and fully prepared for a hard night.

We were off at once, for we were to go through with the King Line ship King James, of London. It was only a short run across Limon Bay. The King James slid past us with engines stopped, a great black mass with many twinkling lights. We too were drifting, to let her pass, and waited for her to enter the left hand lock as directed by the illuminated semaphore. Then we started up our little Kermath and slipped boldly in behind her.

Turse was a faint sound of distant machinery. The great gates behind us glided shut. We were cut off from Atlantic waters at last.

We were at the bottom of a great pit, the dank, slimy, dripping walls rising high above our masts, topped by little lights.

The shouts of the Panama Canal employees and the lock-master giving directions to us came faintly, as if from another world. Our own voices echoed about us and beat back upon our cars. The great ship ahead of us was neglected, for everything runs so smoothly that the business of taking a 20,000-ton vessel through is nothing at all. Our little 10-tonner was quite another question. We were too low for the electric locomotives to hold us in position and pull us ahead, so we were given manila lines forward and aft. They vanished straight overhead into the dark, to the canal men who handled the other ends. These two lines were supposed to keep us in position.

Suddenly Svaap shuddered and trembled, and we felt rather than heard the disturbance of a tremendous volume of water in violent motion. The eight-foot manholes which perforate the floor of the basin were starting to belch forth their contents, and the placid waters about us now boiled

Svaap was thrown about like a chip, the perpendicular lines affording hardly any control. I had been warned that we would be practically helpless in the grasp of the milling waters, but had never expected such a tempest. We were almost at the mercy of the diabolical forces under us, and the pilot threw off his dignity with his coat, and

and surged angrily.

helped us in our struggle to get more fenders over the sides, coils of spare line, rolls of old canvas, anything to keep us from grinding away our bulwarks and planking as we were thrown against the wall.

One minute the bow would leap and strain on the line, and the men on the other end would strive to keep it in place. Then another current would grip the boat and the

bow would be thrown at the wall and the stern out.

Our shouts to the men above to haul, to slack, and to hold fast, echoed and re-echoed from across the canyon. The pilot reiterated his statement that he would rather stay up all night every night for a week taking battleships through than take another 32-footer.

We were rising rapidly, and as we did so the swirling waters grew quieter. A moment later we rode peacefully at the top of the liquid elevator, almost twenty-nine feet

higher in the world.

The black waters now glistened with the reflections of many lights, and we lay quietly at the edge of a nice concrete side-wall. The tracks of the electric mules climbed the little hills alongside, as they crept higher and higher like a scenic railway. To our right, across the basin, was the central wall of the double lock with its artistic lights, its tracks, and a little way ahead, the control house. Beyond, parallel with our basin, lay its twin, empty at the time.

The gates ahead opened, and the King James got under way into the second stage of the lock. We followed at a respectable distance, while our men walked the lines along. Soon we were again at the bottom of a deep dark canyon,

and the exciting procedure was repeated.

In the third stage, the men got careless, and suddenly Svaap was thrown far out. A new current gripped her, and she drove in bow first toward the wall. All three of us threw our weight against the slimy surface to ease the shock as the bowsprit struck sidewise, but we could not

avail against that tremendous power, and the pole slowly sprung at least six inches out of a straight line, and I shut my eyes and waited for the splintering crash. But a new current gripped the hull, and the bowsprit was saved. Its heavy wire shroud was stretched so that it hung in a festoon, but the good stick was none the worse. The only damage was a slight bending in of the port bulwark.

An hour after entering the first stage of the lock we slid out into the fresh waters of Gatun Lake, eighty-five feet higher in level than Limon Bay. Here we tied out at the lighthouse dock, and said good-bye to our first pilot. On the telephone we received orders to proceed at three o'clock in the morning, at which time the new pilot would arrive.

If I ever go through the Canal again in a small boat, I will have them handle it differently. It is simple to have lines to both sides of the lock, and to hold the boat in the middle of the basin instead of up against one wall. Then she could lurch and plunge about without incurring any damage, or causing any trouble.

The moment the new pilot was aboard we got under way. The King James had waited also, and was getting in her anchor as we went by. A little later she passed us with a shouted invitation from her bridge to take a tow line. We refused with thanks, for we had no desire to have our deck torn out at this early stage of the game. Nor did I wish to miss the run across Gatun Lake as the day was breaking.

The channel through Gatun Lake is very well marked, and we followed the red and white lights easily. Although the lake is a vast body of water, it is necessary to follow a narrow channel. Outside there are the trunks of thousands of great drowned trees, for this was formerly a jungle.

Dawn came, and with it a mist which obscured for a time the shores of the lake. Then suddenly the sun rose behind the 600-foot radio structures at Darien, and soon the air was cleared. We were approaching the backbone of the Americas — the Continental Divide — and the shores began to narrow about us. The low jungle and swamp land gave way to hills and valleys.

We had passed several small floating islands, and now we came across a busy little steam launch, the U.S.S. Hyacinth, puffing and snorting as she pushed one of them

out of the channel.

Several ships came along in the opposite direction as the day's traffic through the canal commenced. Each one gave us some sort of greeting. Our pilot, W. L. Wills, found that he was seeing more of the canal than ever before in all his years of service. He considered it a pleasure trip, waving gaily to all his confrères on the bridges of the passing ships.

We approached the narrowest part of the Big Ditch and soon were in the Cut. Work never ceases here, and as we passed between Gold Hill and Contractors Hill a dredge was working at a slide. A little farther along, where it is now necessary to make a sharp turn, drilling operations were progressing to blow up the face of the rock and straighten out the bend. The name has been changed from Culebra to Gaillard Cut. A bronze tablet set in the abrupt face of Contractors Hill perpetuates the memory of the great Gaillard.

By 9.30 a.m. we were in Pedro Miguel lock. An hour later we were starting through the first of the two stages of Miraflores lock. The King James and Svaap had been the only two ships through Gatun the previous night and the King James had already passed through to Balboa, so Uncle Sam operated the great lock at this end of the canal for Svaap alone. We looked more than ever lost in the huge chambers.

The process of being lowered in three stages to the level of the Pacific was easy, for the water is let out of the chambers just as quietly as the water runs out of a bathtub. At just 11 a.m. the last great gates of Miraflores opened majestically, and we were free at last in Pacific waters.

The Canal Zone is a splendid place to lay in stores, fuel, or equipment. The Panama Canal Commissary has almost anything a ship or yacht could need, and the prices are unbelievably low. The great machine shops and yards will handle repairs on any kind of boat very reasonably.

We stocked up heavily, for it was to be a long time before we would have another such opportunity. When we were finished we could have remained at sea for several months, provided there were enough rainfall to replenish our water supply which was good for only forty days.

Having obtained our Bill of Health I started out to get

Having obtained our Bill of Health I started out to get the French and Ecuadorean visés on it for Oceania and the Galapagos. The French visé was the work of a minute. It cost \$1.20. Then I went to the Ecuadorean Consulate. The consul took out his rubber stamp and the ink pad.

'That will be \$60.00,' he said.

When I had recovered enough to speak I swore that I would shun the Galapagos like the plague rather than pay such a preposterous sum for a stamp on a Bill of Health. Actually, my heart was set on seeing those isolated, little known islands, and I would have gone anyway — visé or no visé.

islands, and I would have gone anyway — visé or no visé.

Not until we had argued the matter for some half hour did the consul admit the regular charge was \$30.00, and if I returned the next day I could have the paper viséd for that amount. The extra thirty, it seems, was because I had arrived at his office at five minutes past three, while his office hours were over at three. A double fee was charged for overtime use of the stamp.

Now, thirty dollars is almost as ridiculous as sixty for putting a stamp on a yacht's Bill of Health, so I waited over and saw the Minister of the Ecuadorean Legation. Señor Alfaro very kindly wrote a personal letter to his friend the Commandante Don Victor Naranjo, in charge of the islands, climinating the necessity for any Bill of Health for those islands.

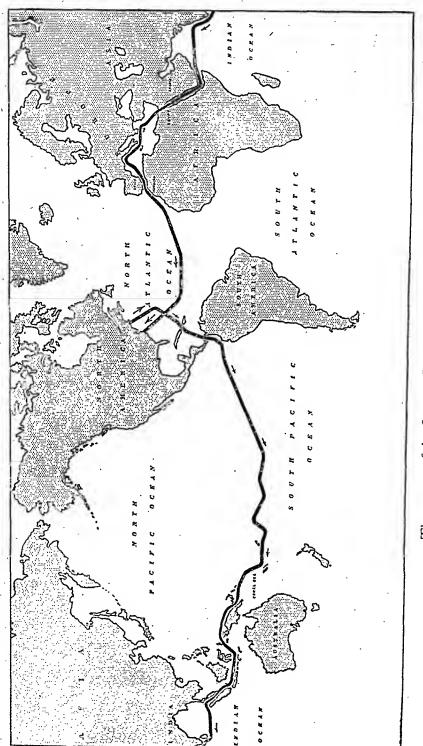
Ten miles out in the Bay of Panama are three little islands: Taboga, Taboguilla, and Urava, and of these Taboga is the largest and most interesting. The tides here rise from twelve to sixteen feet, so it was a splendid place to beach *Svaap* for painting and general overhaul before setting out on the long Pacific voyage.

We took her in to the head of a cove and at high tide brought her alongside an old beached dredge that was used by De Lesseps when the French made their brave attempt to cut the isthmus. When the tide went out she stood there on the hard sand, her straight keel keeping her in a normal fore-and-aft position, with a line from her mast-head to a fixed object on shore to keep her against the fenders we put on the dredge. She was now ready for painting, which we accomplished at our leisure.

Then we started on the squaresail, which I had long planned to make before starting across the Pacific. We did the complete job ourselves. We sewed and roped the sail from materials I had previously bought. We made and fitted the yard and rigged it according to my own design. When it was complete we tried it out in the Bay of Panama and made a few alterations.

At last we were ready. Ahead lay the sea of my dreams—with its countless coral archipelagos, its fertile volcanic island groups, and their mysterious brown-skinned inhabitants. Ten thousand miles of it lay ahead of us, and for two years we were to explore its every corner.

To me it was the eve of the Great Adventure. Everything else had been mere preparation. The real thing lay ahead, and I was anxious to be off. I live my life like that—looking always to what lies ahead. Some time later, perhaps, I will live in the present. When I am old I will have my past, and if that past measures up at all to the future I dream of now, my life will have been complete.



The voyage of the Svaap - June 1928 to November 1931

IT was the morning of October 25th. We were off at last on the long Pacific cruise, our first stop to be the Pearl Islands. The boys of the Boston schooner Chance, bound also for the South Seas, waved a last farewell. A large school of leaping dolphin escorted us out.

It was a glorious start. Our new squaresail pulled like horses with a laughing breeze on our quarter, and I learned a new thrill. Never before had I seen such a sail in operation.

The afternoon brought squalls, which turned into a hard blow from the north-west and increased steadily. The squaresail was furled on the yard, one of us going aloft to accomplish this. Soon we were making for Pacheca Channel and our first anchorage in the Pearl Islands. They had little to offer; we left them just before sunset one evening for San Miguel Bay, from whose mountainous shores Balboa first saw the Pacific.

Next morning we coasted along toward the southern end of the bay: past high headlands and mountains, lowlands which fringed the shore with mangrove swamps and sent wide mudflats out to keep us off, reefs and rocks with the sea breaking over them violently, islands and river mouths. To the south, at the foot of Zapo Peak near the mouth of the Sambu, lay our destination. It was a bamboo village built on stilts on the muddy banks of a jungle stream. There we landed.

My clearest memory of that stay is a certain mountain top where I stood and gazed over the blue waters below. I put myself back four centuries, and saw a little band of armoured Spaniards standing there with Balboa. For the first time white men had looked out upon the Pacific -

round in a great circle for months until the bottom became so foul and worm-eaten that the ship had to be abandoned.

Doldrums, and the fact that whatever wind there might be would be south-west, putting the Galapagos dead to windward, precluded sailing a direct course. We could not take advantage of the dependable land and sea breezes close to the coast because of the adverse coastal current of about fifty miles a day.

Therefore the best procedure for us was to cross the current and head south, keeping just beyond its outer limits. Thus we would sail south close-hauled until we reached the Equator, where the wind drew more to the south and we could turn and head west for the islands. Then we would be helped by the branch of the Peruvian Current that flows out to sea past the Galapagos, forming the South Equatorial Current.

This meant sailing nearly 1100 miles to cover the 840 to the Galapagos.

When the sea breeze came in on the last day of October, 1928, we made sail. That night we had our last glimpse of the Americas — the lofty shores of Panama and Colombia, with the Cordilleras de Los Andes fading out in the southwest, capped in white as befits their age-old appearance. The Pearl Islands were dim in the north-west, but gradually faded out with the sun and were gone. Once again the peaks of the mainland came out for a few moments, bathed in the momentary brilliance of the moon before the clouds shut down. And then we were really at sea again.

The next day inaugurated one of the most discouraging spells of weather I have ever experienced.

A tiny canary fluttered out of the sky exhausted, made a try for our jibstay but missed, falling into the sea. Without clothes as usual, I dived in, swam under him and took him in my hand. On board he took a few drops of water and perched on the hatch. A few moments later he feebly took

off again — circled the mast-head like a tiny Lindbergh — and headed for South America, 75 miles away. He probably died. It was a bad omen — that he would not accept

our hospitality long enough to recover.

All day the breeze swung like a pendulum between W. and SE. The sky was completely curtained off by ominous clouds, and no sights were possible. The sea was like the Gulf Stream when it gets angry. As the light faded drearily out that evening, a sudden wind came from the south-west and increased to gale force, driving a high confused sea and an icy rain before it. We hove to for the night. The driving rain and damp seemed to penetrate everything, and even the little bear slept under a drip and was sneezing next morning. He seemed frightened at this continued earthquake his new small world was undergoing.

All night the gale tore at our squaresail, which was furled on its yard aloft. We waited anxiously for the first streaks of dawn to give us light enough to get it down, yard and

all. Sleep had been impossible.

42

That day the gale shifted to west. The sky was still a leaden dome, the seas piling higher, and a white whistling gale tore the crests off and added them to the rain that still drove at us like hail.

Svaap will heave to under reefed jib and jigger with free tiller, so it was unnecessary for us to be on deck. If the sea had been a normal one, with high but regular waves, we could have slept comfortably as we have usually done. But in this steep, utterly confused mess, it was impossible, for Svaap was thrown all ways at once.

Finally, on the fourth day, it eased up a bit. We risked trying the reefed mainsail and drove her for all she was worth toward the south. We still had not seen the sky, and so our position was yet an unknown quantity. Night came, and with it a change in the weather, for we experienced a series of the worst squalls I have ever seen. They were



terrific, long-continued, with indescribable quantities of rain, and wind like a tornado that jumped from east to west and back again in the time it takes to say it. Eventually we left her hove to under just the reefed jigger, and both of us fell exhausted on the cabin floor. At least, we could not fall out of that.

The fifth day came in with the wind howling from the south-west and still not a glimpse had we had through that dark curtain over us. We do not realize what a wonderful thing the sun is until we have it taken away from us for a time. Especially at sea, where we need it so much more than ever.

By nine o'clock a few light places began to appear in the cloud blanket, and a little later a few glimpses of gold in the rifts sent me diving for my sextant. I stood by for three hours and at last got a series of sights. Checking these with the meridian sight at noon. I found that we had made only 170 miles in all the five days.

The next few days made up in a way for the misery we had been through, for we had a spell of magnificent weather. The gale gradually subsided to a hard wind, to a breeze, and then she sailed along for hours without attention, while we caught up on sleep. Then as if in reverence to the supreme beauty of the sunset, the breeze died completely as the golden disc flattened out its lower side and dived behind a purple horizon.

We sailed on to the south, through schools of leaping mackerel, with countless smaller fish hiding from the sun underneath the shady side of the boat. Sometimes we would get something on our trolling line, and have fresh fish as a treat, and more than once we sunk the pointed boathook hilt deep into the head of a too curious shark.

But with all our pleasant life, we were not making very good progress. Although we were getting well down toward the Equator we had not found more southing or strength in the wind as yet. When we were on the same latitude as the Galapagos, nearly on the Line itself, I decided it was time to turn west, and did so expecting the wind to shift more to the south the farther west we sailed, as the wind roses on the Pilot Chart indicated.

The nearer we got to the Equator the colder it got. We were in the west-moving branch of the Peruvian or Humboldt Current which comes up from the Antarctic. At night on watch I wore a heavy lumberjack shirt, sweater, and coat. Even this did not keep me warm enough, so I would wrap up in a blanket besides.

The light breezes continued, and we worked every flaw for all it was worth in order not to lose our precious southing. The breeze stayed always to the west of south. In fact, we reached the Galapagos at last without having had the help

. of a single day of fair wind.

Up to the last few days I had planned to make our landfall on San Cristobal, for this was the headquarters of the Galapagos. The continued south-west and south-south-west winds caused us to change our plan. We now headed for the outlying northern islands instead, with Tower Island for our landfall. Later we would work south through the group, reporting at San Cristobal almost the last thing.

Three hundred miles from Tower Island we picked up a strong south-westerly and made the best time since leaving Panama, averaging a hundred and fifty miles a day. Then at 5 p.m. on November 15th, I caught a last sight of the sun just before a solid bank of storm clouds swept over the sky. Crossed with a previous sight moved forward, it gave us just sixty miles to Tower Island, course 267 degrees magnetic.

Draw a circle with a radius of a mile and a half, and you can fit Tower Island right into it. The highest land is only a hundred feet above the sea, and it is surrounded by strong

currents. Not a very large speck in the ocean to aim at after a voyage of ten hundred and fifty miles.

As the dark closed in that night we reduced sail, and as it blew harder and we increased our speed, I took the mainsail off entirely and sailed under jib and jigger in order not to reach land before dawn. We did not wish to make our acquaintance with Tower Island in the blackness of a stormy night.

Then came the usual night of doubt before a landfall. Was there surely no mistake in the figures? Well, check them again. Couldn't the faithful old deck watch have changed its rate in this new climate? Guess we had better both stand watch after midnight in case we are nearer than we think.

But nothing happened during the night except a string of wicked squalls, and dawn found us straining our eyes ahead through the rain. Astern too, in case we had slipped past it in the dark. But there was nothing but grey ocean. My heart was sinking, for there would surely be no position sights with such a sky.

Then, as the rain eased up for a moment, a grey lump rose just ahead, seen from mast-head and deck at the same instant. Two shouts of triumph rent the air.

From the Galapagos I received such widely contrasting impressions that I was bewildered. I gazed at the awful barrenness of the desert wastes and life-killing lava, and yet saw a colossal grandeur and rugged beauty in it. Marvelling that nature could have produced a place so utterly impossible of supporting life, I was confronted with myriads of sea fowl that darkened the sky, and gazing into the transparent waters I found them teeming with every variety of tropical fish. Above the clouds of the larger islands I found fertile pampas, wild cattle, horses, and burros.

But by far the strongest and most accurate impression was the one of rank desolation and solitude, for life that is present emphasizes by contrast the everlasting barrenness of most of the islands.

Discovered in 1535 by Berlanga, the Archipelago de Colon, as it is called by Ecuador, its parent state, has remained with one or two exceptions in its original uninhabited condition. With the exception of the settlement and plantation at Chatham, and one or two isolated cases elsewhere, the attempts at colonization have failed, and traces of the venturesome are obliterated. One could cruise the islands carefully, and unless coincidence led the vessel into Wreck Bay on San Cristobal (Chatham), or Post Office Bay on Floreana, the chances are that he would leave and report the islands entirely uninhabited.

Tower Island, the smallest and most isolated of the eleven major islands of the group, remains more vivid in my memory than any of the others, due partly to the fact that it was the first we explored, and to the fact that it is different from all the others. Tower Island is really the top of an old volcano, almost circular, and without anchorage. On all sides the cliffs tower vertically from the surf. The top is quite level, as if the volcano had been sliced off by a gigantic scythe. The former crater, on the south-west side, forms a clam-shaped bay into which a small ship can sail. As it has no bottom at 75 fathoms you cannot anchor except possibly in very calm weather on a small ledge in the northern end, but as the sides are vertical you can sail round and round in the old crater.

The island is the home of many curiosities of the bird and animal kingdom, and has been very rarely visited. I was resolved not to miss it.

We found the entrance to the bay a mass of breakers from the storm.

It was absolutely impossible to get in, and so after sixteen days at sea we were forced to run around to the lee side and sail off and on, off and on — waiting for the wind to blow itself out. Even here, on the sheltered side, great breakers dashed against the base of the cliffs and landing was impossible.

Our two days and nights spent in the lee of this island, beating back and forth continuously with the gale shrieking over the top of the cliffs, are for ever impressed upon my memory as some fantastic dream that could not, yet did, happen.

The branch of the Peruvian Current which leaves the coast of South America near Cape Paita and shoots out to the Galapagos, acquires its greatest strength among the islands, which divided it into many swift-running rivers that cannon from one island to another to follow uncharted courses.

Two of these currents, one coming around each side of Tower Island from the south, meet in the lee of the cliffs to the north and form a region of rips, eddies, and whirlpools.

B*

It was an ideal place for fish, and we put out a trolling line almost at once. We were all out of lures, spoons, etc., having lost them one by one to the great fish we had battled along the San Blas coast and in the Bay of Panama, so now we used nothing but a white rag on a heavy hook. I found this to be almost as good a lure as the expensive spinners and feather jigs that are generally used.

The bait was no sooner out than a lightning swirl and a flash of colour in the water behind it presaged the first strike, and the line screeched out as the fish made a beautiful run.

It was a rainbow-hued kingfish who was soon pounding the floor of the cockpit. He was followed by a grouper as soon as the line was over the side again and after that came a tremendous strike and a run that amazed me.

A six-foot fish left the water in a streak of blue and silver, and a second later again — fifty yards from the first spot. I had never before been fast to such a lightning-like fish. He would ricochet along the surface, disappear, and in an instant reappear on the other quarter and leap clear of the water. The energy and power of this fish were amazing, and it was some time before he was brought within reach alongside. The shimmering blue and silver bars about his powerful body identified him as the wahoo, the first I had ever seen. I believe that the wahoo is one of the greatest fighting fish for its size in the seas. As we drew him aboard, several grim shapes followed him to the surface. These were the sharks.

The water was literally alive with fish, and soon the air was filled with boobies, frigate birds, beautiful snow-white bosun birds, terns, and many smaller species. The air was made hideous with their cries as they fought one another for the scraps we threw over, and when we started using cut strips of fish as bait, they would swoop for this and carry the line high out of the water, holding tenaciously to the flesh until drawn almost aboard.

Looking ahead I suddenly noticed a great black mass almost under our bow, right on the surface. The chart, I knew, showed no outlying rocks, but in an instant I threw the tiller hard over and we passed within ten feet of what was not a shoal, but a monstrous giant ray, his great triangular bat-like body twenty feet across. The tip of sometimes one wing, sometimes the other, curled out of the water as he swam slowly along the surface.

A moment later another appeared, and while we were watching it the water opened wide in a tremendous upheaval and vomited a black quivering mass of several tons into the air. The great ray turned completely over in the air, showing to us his silvery underside, and fell back with a crash and roar of impact that was stunning. The water rose thirty feet in a solid geyser and then fell back to fill up the great hole caused by the entrance of the monster. A steep wave radiated from the spot and a few seconds later slapped against the side of Svaap. We were amazed. I learned later that the rays leap right out of the water in this way to shake themselves free of the parasite fish that bother them.

We continued to fish, freeing whatever we caught, for with the first fish or two we had more than enough for food and bait. Back and forth we sailed, over the same course, and matched our wits with the sharks to land our fish. We could have stocked a market in a few hours.

There were dolphin (not the mammal, but the fish named coryphene), and albacore, and Spanish mackerel with its golden spots, and bonita and amberjack and yellowtail, and the beautiful and powerful yellow-fin tuna, and the wahoo and kingfish, and so on endlessly.

They seemed to live in peace together, but the minute one was hooked the sharks would appear and often cut off all but the head as we fought the fish. Sometimes a larger shark would completely engulf a six-foot fish. Then we would say farewell to our line, for there was no stopping the irresistible force of a fifteen- or twenty-foot shark.

What brutes sharks are: powerful beyond imagination, utterly ruthless! Several of our scientists have been quoted in defence of the shark. These claims are so completely untenable to one who has seen what the sharks can and will do as to be ridiculous. I do not say that sharks hunt man as the great four-footed man-eaters of Africa do, but I do know that they will devour anything in the way of meat that comes before them, whether fish, fowl, animal, or man.

In the Pearl Islands, on one occasion, I saw a small boat go out with four natives aboard. It came back with three. The sharks had accounted for the fourth. This is only one of many incidents I know of. Ask any of the pearl divers in the South Seas why they will not go down in some waters, and ask them why there are always some missing at the end of a season.

Another myth is that the shark has to turn over to grasp its victim. I watched the sharks in San Miguel, and in the Galapagos, and later in many other places, and have seen them approach their victim in every position, whichever happened to be most convenient at the time.

So completely confident of their immense power are they, that they have no fear. When we captured a shark we would hang him over the stern and the others would devour him while he touched the boat and while we drove spears into them. I drove a heavy iron, time after time, six inches deep into the head of one of these beasts and he continued to tear at the carcass over the stern, refusing to let go. Their vitality is tremendous and their complete abandon to savagery marvellous to behold.

Late that day a great wahoo took the bait and left the water in a beautiful flying arc and began the most wonderful display of speed and agility that it has ever been my

luck to witness. He was as big around as a telegraph pole, and the largest I have seen. The fight was not between the wahoo and myself, but with a monstrous bronze shark. It was pitiful to see the frantic efforts of the beautiful fish as he slithered in and out of the water in a series of parabolic leaps and curves too fast for the eye to follow, trying to escape the shadow of death behind him. Nothing I could do could save him. Finally the huge hunter swooped upon him with a burst of speed, and nothing but a severed head was left upon my line. This was instantly bolted by a smaller shark and a new fight started, in which we were the victors. Revenging the beautiful game fish, we slit the shark open and slid it back into the water. A great cloud of blood spread like ink, and out of the shadowy depths rushed dim shapes to the feast.

All about us the everlasting fight for life was progressing. The small fry were beset from sea and air. We watched the boobies soaring overhead, and tried to follow them with our eyes as they folded their wings and shot straight down and out of sight in the water. They never failed to come up with a fish, and often would be bothered by the man-ofwar bird who would force the boobie to drop his catch. This the robber would snatch, and the boobie would look for another meal.

Little swallow-like birds held their wings out as planes, getting just enough lift from them to run along the surface of the water after small fry.

Needle-fish flew along the surface with only their vibrating tails touching the top of a wave now and then, and flying-fish broke water in schools. A pair of whales joined us, and soon after came a school of rollicking seals and sealions. Huge green sea turtles came up to fill their lungs and startled us in the night with their stentorian gasping.

And so the time passed as we sailed back and forth close to the cliffs where the rollers mounted higher and higher and finally crashed with their everlasting thunder against the iron walls to shoot skyward in the cracks and crevices,

booming hollowly in the deep worn caves.

All night we stood our regular watches, with reefed jib and jigger only, trimmed too flat for efficiency so as to make each tack last as long as possible. The life in the water around us became even more active. Blazes of phosphorescence carved trails through the black waters to show the passage of its finny inhabitants, and every now and then we would be startled by the near-by explosion of a giant ray leaping. The great shimmering mass of their bodies could be seen easily. We gave them a wide berth for a playful slap from their monstrous fins might make kindling of our planking.

The gale reached its maximum strength the second night, with a strange quilted sky, and tremendous blasts which came over the cliffs and held us rail under. The island gave us smooth water and we hugged it as closely as we dared.

Next day the wind moderated, and after a heavy beat we reached the two claws of rock that guard the entrance to Darwin Bay. There was still a nasty sea across the mouth, but not enough to prevent us from entering. It was strange to leap suddenly from the continual motion of eighteen days at sea, into the quiet waters of the old crater, and we looked about us with curiosity. We could not wait to set foot ashore. The 'landing place' of the chart, however, was a mass of breakers. Round and round we sailed, looking for a spot where it would be possible to land. We could have tied right alongside the cliff (for the water goes straight down at the edge), but for a dangerous surge with a rise and fall of six feet up and down the face of the rock. It did not seem to be a common wave motion, but the whole body of water seemed to lift and drop at irregular intervals.

A small shelf of rock and a jagged cleft in the abrupt

wall seemed to offer a place to land and ascend, so we launched the cayuca. While Bill imitated a merry-go-round in the crater I went ashore and manœuvred off the little ledge until a surge came that lifted me to its level. A leap and scramble put me on the rock, and the cayuca immediately went down like an elevator with the receding water. A long painter let it ride out from the face of the cliff. The sun was shining for the first time for days, and the water was like crystal. Countless exotic fish swam along the rock beneath me. Little angel fish and revalo and trigger fish mixed with myriads of strange types in a maze of colour.

I shouted instructions to Bill and turned on my narrow ledge to climb. An angry bellow greeted my movement, and I faced a monstrous sea-lion.

Cornered on the tiny shelf of rock, as I was also, he lurched for me with further hoarse comment on the intrusion. I turned to dive for the canoe which was within a few strokes — but recoiled just in time. A big shark waited at my feet.

I do not like to kill unnecessarily — but was forced to put four heavy slugs from the .38 into the animal's head until he dropped — a ton of quivering flesh — at my feet. At the top of the cliff I received a second surprise. I had

At the top of the cliff I received a second surprise. I had stumbled in unannounced upon what appeared to be a lawn party of all the tropical bird species. A chorus of screams cackles, and shrill whistles, issued from a hundred thousand throats. They sat upon the lava, on Herculean cinders, and in the tiny ashen-coloured stunted trees which with the exception of a little burnt moss were the only growing things on the island. Some of the birds had rough nests of sticks and guano, but the majority merely crouched on the bare rock They would not run or fly, but stood up when I came near, snapping their beaks and flapping their wings menacingly, screaming. Others, hearing the commotion,

arrived by air from all directions, and tried to drive me

out by swooping close to my head.

There were several varieties of boobies, blue-billed ones with red feet, red-billed ones with blue feet, and some with regular bills and feet. There were thousands of frigate birds, the distended red neck pouch giving the males a grotesque appearance. Beautiful bosun-birds kept to themselves along the edge of the cliff and did not join in the tumult.

Standing there, I saw life's whole cycle at a glance. Chicks cracked open their shells and first saw the light of day. Adults fought, mated, and fed their young. Feeble old birds stood all about — lifeless bundles of unpreened feathers waiting for death. A terrible stench filled the air.

One is surprised at the size of these sea-fowl. So light and graceful in the air and on the water, they are actually as large as barnyard geese, and are very heavy and clumsy

on land.

On the very edge of the cliff I came across the queerest sight of all. An area of perhaps five hundred square feet swarmed with miniature black dragon-like creatures, five-toed, that scrambled and stood all over one another. They did not seem alarmed in the main body, and cast baleful eyes upon me. They were the young of the marine iguana that exists nowhere else in the world but the Galapagos.

As I approached they retreated en masse to the very edge of the cliff and stood their ground. Their method of defence was perhaps the most unusual I have ever seen. Coming within a few feet I was astonished to see them crouch in solid ranks, all facing me and spitting at me as fast as they could.

It was a most remarkable sensation to be the target of several hundred indignant expectorating sea-lizards. Their fire was desultory, but very effective in keeping me at a distance. The maximum range seemed to be about six or eight feet, one large drop at a time, and after a certain number of shots they would run temporarily out of ammunition.

I captured a straggler, and later another. We tried to make pets of them but were unsuccessful for they refused nourishment of any sort. One died before long, and the second was freed on another island.

It was quite late in the day when I returned, my wanderings over, with my captives dangling on a line at the end of a stick—out of spitting range, I had rather an amusing thought as I scrambled down through the crevice again before leaping into the *cayuca*. Suppose I had thought of spitting back at them! It might have taken them unawares to have been faced by such a magnificent spitter as I must have been in their eyes, as a Big Bertha would be to a pop gun.

have been in their eyes, as a Big Bertha would be to a pop gun.

We left Darwin Bay just at nightfall on Sunday,

November 18th, with quite a breeze still blowing from the
south-west. It made San Salvador, our next stop, almost a
windward beat.

One cannot relax for a moment from extraordinary vigilance while among these islands. The currents are always running, and one can only guess at their direction and strength. Coming out of the bay we had a moment's trouble with the mainsail. It refused to go up on account of a fouled downhaul. In the short interval while we jogged along under jib and jigger we were very nearly set upon the rocks by the current sweeping past the mouth of the harbour. It served as a good lesson to us, for we were extremely careful from then on.

The next day was an event in my life. We went over the top of the world at last — crossing the Equator at just ten o'clock. For a week we had been practically within sight of the Line. Now we were actually in South Latitude. I felt that we were getting on.

Before us lay San Salvador. In the distance that great

island — Isabela (Albemarle) — thrust its peak out of sight in the clouds and stretched seemingly into infinity. Nearing San Salvador we saw that it was a typical Galapagos island, lava and rock, with a few patches of green verdure here and there on its ghastly burnt slopes, and blistered everywhere with countless cone-like craters, little and great.

James Bay did not prove interesting, so we skirted the coast to Sulivan Bay. Just at sunset one evening we neared Mt. Tim, and a half mile offshore we passed close to a great pyramid of volcanic rock that towered straight into the air and looked for all the world like a huge iceberg with the last rays of the sun reflecting from the white bird lime that covered its faces. After a short beat into tremendous gusts off the craters about Sulivan Bay, we were in the midst of the most spectacular scene of nature in the raw that the imagination could conceive: great thrust-up crags, huge fragments split away from the side of cliffs, crevices that severed a mountain so that we could glimpse the fiery setting sun through its very heart. There was no vegetation anywhere but the dust-coloured stunted bushes and lone sentinels of the great Galapagos Cactus. The solitude and colossal grandeur of the place were overpowering. It was the end of the earth — the utmost, impossible end.

We anchored in a little cove off a sandy beach on Bartholomew Island. This was separated from San Salvador by a gorge through which the current poured. Supper was eaten to the accompaniment of the barking and bellowing of herds of seals and sea-lions along the shore. We shared the freshly-caught fish with schools of small sharks that had been following the boat for some time.

had been following the boat for some time.

It was dark almost at once, leaving only the weird silhouette of the craters, and all the towering split fragments and boulders. The trade wind whistled in the rigging—even with the protection of the island—and we were thankful for the lee.

The best time to make a new harbour is just at dark. One can thus run the whole gamut of sensations twice. There are the first entrancing impressions of the new haven by the last failing rays of light; and there is a night of anticipation with the promise of a complete revelation at dawn.

We awoke to find a cold overcast day. The water, due to the Humboldt Current from the Antarctic, was cold enough to give us quite a shock as we took our morning plunge.

Droves of seals covered the beach and rocks, and disported themselves in the water like children at the beach playing and fighting amiably and sometimes fiercely. It was queer to find this bit of Arctic life a few miles from the Équator. We had a great deal of fun with them ashore. One great bull on our beach was king of the island. When we disturbed them he would come at us bellowing savagely, as if to drive us out. If we stood our ground he always stopped when he came within ten feet, but if we turned and retreated he would follow up his advantage and flop along after us as fast as he could, roaring continuously. We made a pet of a little fellow eighteen inches long. He could swim like a fish already, and got about remarkably well on the sand. His cries sounded like those of a lamb but his mother always answered with a deep terrifying bellow. The little chap was a bit afraid of us at first. Later he would lie still and contentedly allow his soft silky fur to be stroked.

The curiosity of these animals was great. When we left the canoe on the beach there would be several seals there in two minutes, examining it closely, sniffing at anything in it. But one evening we discovered that they could be more antagonistic if they so wished. We had been down in the second bay after turtle. There had been many of them swimming about in the miniature surf of the tiny cove, and the night was enchanted. We lingered and watched the moon sink in the chasm between the great pinnacle and the cliff. It was late when we turned our steps toward our own bay, and the colony of seals had become quiet, asleep on the sand. As we traversed the length of the beach to where the cayuca lay, all became aroused and retired to the water amidst a tremendous uproar. They seemed furious at this night invasion, and formed a solid line in the surf, milling about and roaring prodigiously. Had we launched the cayuca we should certainly have been upset.

We sat there an hour and waited. Then another hour. For a time it looked as if we would spend the night there, but the ranks thinned until only the big bull and a few followers were left. His voice stood out from all the rest,

deeper and more powerful.

When they were at the other end of the beach we shot the cayuca through the surf and made for Svaap. It was close. The patrol was after us in a second, making the air tremble with their uproar and splashing and butting at the little craft. We made Svaap none too soon, for the whole tribe was again aroused and all plunged into the water after us. Our anchorage remained the centre of attraction for some time. The big bull and a few others kept a constant guard about us until morning, roaring so that sleep was impossible.

While I was occupied, Bill was never idle. One evening he returned with a live eagle and a huge sting-ray. He had a complex on capturing things. But I think this must be the first occasion on record of catching an eagle by hand. He tempted it closer and closer with meat until it fed from his hand. Then he seized it by the neck and talons. It was a beautifully mottled bird, strong and ferocious. We kept it on board for a short time.

Another evening, when I had begun to worry about Bill, he came back with the cayuca it a sinking condition with a two-hundred-pound sea turtle wedged in it, and a tale of

battling with it hand to hand in the water. It seems he plunged in after the animal and grappled with it, getting it turned over in the water. In this condition a turtle is nearly as helpless as when upside down on the sand. Having worked the turtle to shore he tied up its great flippers and got it into the cayuca by sinking it under the beast and bailing it out — a trick we learned from the San Blas Indians. This turtle was kept on deck alive, and journeyed with us to San Cristobal, to form the pièce de résistance for our Thanksgiving feast.

Twice I climbed to the top of the highest crater on the island, there to feast upon the gorgeous spectacle that unfolded itself before me. For company I had an eagle who circled about and perched on a near-by crag, resentful of this unprecedented intrusion into his domain. Ridiculous as it may seem, there were grasshoppers flitting about with flashes of yellow and orange. What they were doing there I do not know, for there was not a blade of grass on the island—just a few cactus plants, some brittle scorched-looking moss, and a few small green vine-like plants and tufts of straw between clinkers.

From this height nearly the entire group of the Galapagos was visible. Albemarle, that remarkable island with its five volcanoes towering mile high into the clouds, stretched away until lost in the distance. Near by lay the bulk of San Salvador and its countless cones. I could see the peak of Santa Cruz. San Cristobal lifted dimly through the haze. Beneath and all about me were craters. Craters with abrupt sides all pocked with great boil-like blemishes whose round cores went out of sight. Craters with smooth reddish sides. Craters with furrowed brownish slopes. Craters, craters, craters. I believe it was Darwin who said there were ten thousand craters in these islands. He did not exaggerate. Rather the reverse.

From this height the terrible solitude impressed me still

more forcibly, as did the cruel beauty of the place. I prefer to believe that I was the first to stand upon the peak of Bartholomew, and it is not unlikely that I was.

My strongest memory of the character and appearance of the Galapagos is the view as I stood on the top of Bartholomew, but the strangest thing I saw was the inside of the crater itself. This peak was unlike most volcanic craters. During the last eruption the lava had risen in a monstrous bubble to form a perfect dome over the crater. A sudden release of pressure through a small hole in the side had allowed the bubble to cool and harden as it was. It remains to-day like the dome of an observatory.

to-day like the dome of an observatory.

I found that I could crawl through the hole, and I stood inside on a narrow ledge over the abyss. Great clinkers and rocks, dislodged from my level, could be seen far below in the interior of the ancient furnace. The heat had left its mark in curious colours. Opposite the opening was a pile of grey, yellow, green, and red powder, gradually trickling downward. The insides and ceiling of the dome were ornate with frozen drippings of fused metals. There was a strange odour that reminded me of green corn being husked.

There was no life, and no sound but the mournful moan of the wind in the opening. I crawled to the opposite side of the ledge and took a picture through the hole, with San Salvador's peaks in the distance, and before leaving left a note in case some other venturesome soul should explore the

same weird place.

Hours later, having descended by the southern slopes, I was poking along among the grottos and caves of the shore. I came across a strange bird, like a heron but smaller and coal black. It had a long neck and beak, and red eyes. Halfway down the neck was a big lump, as if he had swallowed a tennis ball. Trying to get him for a specimen, I only wounded him, and he darted into a near-by cave. I entered also, crawling on stones and reaching under water for pebbles

to toss at him to drive him out. It only succeeded in driving him still farther in.

Deep in the cold clammy cavern, with water rushing in and out ominously, I reached in up to my elbow for a stone. Something soft and firm tightened around my wrist. I looked down to see the long repulsive arms of an octopus. An instantaneous recoil tore the hand free, for he had not yet found a secure hold, but for days my skin was sore and I wore a bracelet of angry red blotches.

All the time we were in the Galapagos some fiendish destiny saw to it that we had nothing but head winds. We left Bartholomew and had a weary beat to Santa Cruz, and another to San Cristobal against a steep confused sea. We were bound for Wreck Bay, from which we could reach Progresso, the only settlement in the Galapagos. By the failing light of day we closed with the land and followed the coast. In bright moonlight we entered the pass, avoiding the dangerous outlying reefs by the thundering surf which betrayed them. A tiny yellow light flickered out to us from shore. It was the first sign of human life that we had seen since leaving the coast of South America.

Morning. On shore stood a half dozen shacks, bleak and deserted. A little blockhouse flew an enormous Ecuadorean flag, for these islands belong to that country. One usually finds that the smaller the country the larger the flag. Wreck Bay was no exception, for this one looked for all the world as though it would carry house and all over the hills in a strong wind.

There was no sign of life at first, and as this was the port of entry for the Galapagos we remained aboard to avoid any unpleasantness by going ashore without the usual ritual. Small countries are jealous of their power and resent the attitude Americans so often assume in ignoring regulations. This at once turns the people against them and closes many doors that would otherwise be open.

Toward noon a small cavalcade on horses and burros arrived at the beach. Major Fernandez, who was governor of the islands and Port Authority, was accompanied by four slovenly privates with blanket ponchos about their shoulders and a tremendous amount of mud upon their boots. The Major himself was quite neatly attired in a tan corduroy uniform and campaign hat.

I learned that the Commandante to whom I had a letter from the Ecuadorean Minister was no longer in the Galapagos. Major Fernandez had replaced him. The story the natives told us was that the Commandante had been removed for overdoing the petty grafting which is so rife in South American politics. The particular instance, they said, was the continued confiscation of oil intended for the harbour lighthouse we had seen. This oil had been sold to the inhabitants by the governor, and thus there was none for the light.

Whether all was well with the oil supply when we were there I do not know. I do know that the first two days we were there the light burned regularly. Then the schooner *Manuel J. Cobos*, belonging to the owners of the island, and the only link with the outside world, arrived in port and the light was lit no more during our stay. This schooner takes the produce of the island to Guayaquil every two months. If we had not arrived just when she was expected we would have looked in vain for the lighthouse that night when we made port.

The village of Progresso, the only settlement of any sort in the Galapagos outside of the plantations of Antonio Gil on Albemarle and of two or three men on other islands, lies hidden in the mountains of San Cristobal.* It is alternately subjected to a penetrating drizzly cold and a scorching steaming sun. Each day until mid-morning it lies shrouded in dripping grey clouds that relentlessly deposit their con-

^{*} The Galapagos never had any indigenous population.

tents in the form of a fine mist-like rain that saturates everything and transforms the reddish clayey earth into clinging pasty mud, and the little village into a bog. Then the tropical sun takes charge and everything steams and sizzles and the least exertion causes the sweat to pour out in rivulets. In late afternoon the clouds usually settle down again, and the nights are as cold as November in Maine.

From Wreck Bay to Progresso it is a five-mile trek, mostly up. The near-by mountains hide the view of the higher ones farther back so that as you climb you think the next rise to be always the last — only to be confronted by another still steeper one. For the first part of the way, over a bullock road of soft powdery red earth, you pass through low brush extending as far as eye can see. The delicately coloured scarlet-centred flowers of the wild cotton are supplemented by the tree-like cordia bushes with their mass of large yellow trumpets, and the queer thick blossoms of the cactus and the acacias.

Now and then there is a flash of blazing red and the small vermilion fly-catcher hovers about your head with a tinkling song of curiosity, totally without fear. Canaries, and several kinds of fat, tailless little birds are there in legion, as are the giant painted grasshoppers which shoot about in all directions.

The little mottled Galapagos lava lizards dart about under foot, so unlike the great ponderous marine iguana, or the gaily coloured giant land iguana which we had already seen on other islands.

Later one reaches the level of the low hanging clouds. The temperature at once drops and the path becomes deep mud instead of deep dust. You breathe a fine mist. Your sweat-soaked clothing clings to you and you feel a chill. The clay-mud clings to your boots. You stagger along on gradually growing stilts until they become too high and

the weight too much to carry; then you stop to break them off and start all over again.

When you are about to despair of ever reaching Progresso you suddenly come to the first of the guava that grows rampant over the upper reaches of the island. You stop for a feast.

From here the way is not long and you will be joined by some piratical vaqueros dressed in picturesque rags and mounted on small wiry pampas horses. They wear pointed brass sheath-stirrups that enclose the foot like ancient armour. Some of them ride bareback. All have beautiful lariats of leather. A few peons pass, on defeated-looking burros, perched high on the wooden cross-frames that are used to carry the tremendous loads of wood, cane, and other produce under which one sees the little animals staggering.

At last the road loses all semblance of respect and goes nearly straight up. One scrambles over the top and finds the village nestling there on a little plateau. A small decrepit sugar mill with its tottering black chimney is first. Then a small frame shack that houses the Major and serves as administration headquarters for the islands. Just beyond comes a large ramshackle house, and then, above all the others, asserting its mastery, stands the stone and wood house of the 'patron'. The rest of the village consists of the squalid huts of the peons, laid out in some semblance of order in three rows, with no trees or vegetation. There is only mud, and a little grass.

Manuel Augusto Cobos, patron of San Cristobal Island, is a small potentate. Ecuadorean, educated in Paris, he holds a position of unique power on the island, like a feudal baron or minor king of old. San Cristobal had long been a penal colony to which the cut-throats of Ecuador were sent to slave out their days. Under Manuel J. Cobos, father of the present patron, a profitable plantation was developed with this convict labour. Young Manuel was sent away to Paris to be educated.

The elder Cobos became over-cruel in his handling of the miserable horde, and several very unpleasant occurrences led to tragedy. There are stories of unfortunate individuals thrown on outlying desert islands to suffer the slow torture of death by hunger and thirst in punishment for trouble on the island, and of the outright killings of several convicts. Six men are said to have been flogged to death and five more shot for minor offences. Perhaps some of this may have been necessary in self-defence. In any case Cobos was one day lured unarmed to his door and very thoroughly slaughtered. The prisoners escaped to the mainland in the boat belonging to Cobos, but were later apprehended.

As a result of this tragedy the Government of Ecuador gave the entire island to the heirs of the murdered man, so that it is now owned by three people: young Cobos who lives on and rules over his little domain, and his sister and brother-in-law. The latter, Señor Alvarado, travels back and forth on their schooner every few months and sells the produce of the island in Guayaquil where he lives.

To-day there are no convicts, but the peons are all descendants of that class or freed prisoners. They seemed quite servile and obedient to Cobos, although the fact that he never goes unarmed may have something to do with this. They are paid a small wage, and may buy necessities at his store. There is a total population of perhaps two hundred on the island.

At the invitation of Señor Cobos I moved ashore and stayed several days in Progresso, sleeping in his office on a nondescript couch. It was almost the very spot where his father had been killed.

The first night was terrible. The mosquitoes were so thick I could at any time reach out and grab a handful from midair. I had no sleeping net, and stayed up into the early hours

of the morning, trying to write. I did not dare to go to bed. The silence of the mountains after weeks of living with the sound of the sea was only accentuated by the intermittent bawling of a mule, the night noises of the horses across the way, the bark of a dog, the complaint of a cow, and the everlasting boring song of the mosquitoes.

At length, weary beyond words, I crawled in and as a final resort submerged completely under the blankets, head and all. The persistent insects were reinforced by legions of rats that made more noise than a pack of hungry dogs

and raced all over me from head to foot.

Through it all, even though the mountain wind blew like a November gale at home, there was in me a curious sensation of stability. It was my first night ashore since San Blas, several months ago.

Days of roaming far and wide on a horse in the upper pampas and mountains above Progresso accustomed me to a new life. It is strange how quickly and completely one adjusts oneself to circumstances. The unusual soon becomes taken for granted. One receives new ideas and sees strange races and customs as if they were the most natural thing in the world. I soon felt as if the past five months of intimate association with the sea were but a memory of a distant past. The life here was so entirely removed from the sea as to render this effect most complete. I might have been a thousand miles inland. It was only when I climbed the highest mountains that I could see the ocean, a vast expanse of blue far below. Even then it seemed more than ever a different world.

My world was a world of mountains and pampas; of hard riding vaqueros and plodding peons; of wild cattle, horses, donkeys, and pigs; and of hectares of dank steaming coffee and bananas; and burning fields of sugar cane. It seemed the natural thing to feel the ripple of the horse beneath me as we dashed over ever-winding cow trails or

forded dangerous rock-strewn streams. When thirsty or hungry I reached out and grasped a ripe guava, or an orange, or perhaps an avocado pear. I gazed from the peak of El Honco upon the shimmering blue Pacific as upon a vaguely remembered stranger.

EVERYONE who has visited the Galapagos during the last few years has come away with a vision. That vision is Karin. I fell in love with Karin — but so have the others of our fortunate few.

Karin is one of the Norwegian pioneers who came in 1926 to form a colony on San Cristobal. Theirs is the tragic story of a little group who emigrated with their all, in the treacherous 1000-ton concrete boat which they called Albemarle, from their native land to the far-off Galapagos. They failed through lack of co-operation and the necessary money to hold out the four or five years necessary to get things on a paying basis.

There were eighty of them, fifty-six men and the rest women and children. They brought with them all their possessions, furniture, farming implements, fishing material, and even a Ford tractor and wagons. Only a few of the cream stayed when the others gave up. The Albemarle was sold in Panama to a Colombian by a party that cheated them out of a goodly part of the money received for it.

The other things were sold to Ecuadoreans, also at a great loss. When Svaap arrived at San Cristobal there were only fourteen of them left. Four of these left on the Cobos schooner a few days later, and by now I think only Karin and her family remain.

Karin lives in a neat little board shack miles back in the mountains, with a father who is tired of life and does not count, and an equally worthless brother who spends his time dreaming of the cities and wishing he were away from this lonely island.

There, high in the hills above Progresso, with only a

mysterious hermit near by, the girl Karin tills the land with a handful of cut-throat peons and ex-convicts. She rides among them unafraid of their great knives and machetes, with a tiny gun in her pocket. They obey her every order. With a bit of a swagger to carry it off she rules over the little plantation, knows all about each crop, croons over her chicks, and carefully caresses her first jasmine blossoms and roses.

Here, surrounded by solitude and hardships, Karin — completely and utterly feminine — writes for herself her 'Romance Pictures' as she calls them in her broken English, and a bit of poetry, and reads the classics. Her little board shack in the clouds is the most incongruous spot in all the Galapagos. On Dictator, recently captured but the finest horse on the island, she rides out straight and proud over her little domain. What mixture of bloods can have produced such a person is hard to imagine. She is not brave — the word is too futile — she is heroic.

There is a companionship born on horseback, and we spent many hours exploring the upper reaches of San Cristobal. We galloped over the pampas among the wild horses, and routed herds of braying wild donkeys. We laboriously climbed to the top of the dead volcano El Honco, to see the reported crater lake, and let our horses drink of its cool waters and eat the grass at its edges while they rested from the hard climb. Here we felt the trade wind in its full strength, and again I could see the almost microscopic white lines of the surf, moving in orderly manner on the shores below. Far in the distance, to the south, a lone hut could be seen, toward Porto Grando, but no other sign of civilization. Stage clouds drifted across our field of vision far below, and sometimes cut off the sun from above, and then it was cold. The crater lake was rimmed part way around by great volcanic ejections; then they stopped and there was a green bank; then a crevice where the water

escaped to find a devious way to the sea. Frigate birds were diving in the lake. It was strange to find them here. Karin watched them shake their bodies after diving, and laughed. 'It is the fish jumping in the stomach!' she cried.

It was late when we descended, and as we paused before plunging into the dense guava growth of the lower plateaux we turned for a last glimpse of El Honco. The wild horses stood profiled along the ridge of the mountain. As we watched, a great billowing sunset cloud crept slowly out of the sky like a legendary fiery dragon and swallowed them and the purple mountain out of sight.

We sailed in the early morning of December 2nd. The evening before supplies and water had been sent down from Progresso by bullock cart, and all our friends had come to say farewell. The last to go was Karin, with Señor Cobos. Close against the breast of the girl clung the little honey bear from San Miguel Bay. He had found a new and happier home.

They rode off into the dusk. Once more I saw them, as they turned to wave from the first ridge — then they were

gone, over the horizon.

It was nightfall, several days later. We were becalmed out of sight of land. I suddenly noticed the compass slowly revolving. In a moment it had described a complete circle, then another and still another. Looking over the side I saw that we were motionless in the water. I made sure that I was awake and not dreaming. Then I looked aloft and beheld a most amazing sight.

The whole heavens were slowly and majestically revolving on a centre directly overhead. It was a most disturbing sensation, and there was a queer feeling in the pic of my stomach that reminded me of the feeling I had as a boy when I had ridden too long upon a merry-go-round. I

realized now, of course, that we were in the grip of a tremendous whirlpool, the whole body of water as far as I could see in the dim light revolving with us in its centre, much as a railroad turntable revolves with a locomotive.

Later a vagrant breeze came along and we gathered headway. Even then we continued to revolve as we moved through the water, coming about and gybing unwillingly twice before we had sufficient speed to overcome the gigantic swirl. The breeze lasted long enough to carry us beyond the disturbed area before it dropped entirely.

No wonder these were called the 'Enchanted Isles' by

No wonder these were called the 'Enchanted Isles' by the early navigators. Where else could one lie becalmed upon the sea and find the heavens revolving about one's head; or sea-lions sharing a beach with giant marine iguanas that carry one back in the wink of an eye to prehistoric times; or five-hundred-year-old turtles large enough to carry several men on their backs, living in the mountains and climbing cliffs? Where else could one find the albatross and the pelican sharing the air with the tropic bird and the scarlet flamingo; or the penguin fishing in the same bay with the flightless cormorant?

Even the discovery of the Galapagos was the result of a curiously contrary nature, for Berlanga, the Bishop of Panama, did not go of his own volition in 1535, but was carried there by the current during a long continued calm. Scientists have come and gone, studied and debated, and still there is no real solution of the queer phenomena to befound everywhere in these isles. Even the geologic origin of the archipelago is uncertain, although I think that the geophysical facts available to-day lend weight to the theory that it was not always oceanic, but was at one time connected to the mainland of Central America by a land bridge. A study of the chart soundings reveals a sort of plateau, of shallower depths than the surrounding ocean, connecting the islands with this part of the mainland. The absolute solution

65

of this problem will hold the key to many of the mysteries of the Galapagos.

Our stay in these islands was nearing an end, and one dawn found us coasting along towards Post Office Bay, to be our last port before the 3700-mile run over to Tahiti. Floreana - with its little guardian islets - lay in grandeur, with full upon it a lone spotlight of gold from the yet hidden sun. The sea, and the other islands in the distance, were still half hidden in gloom. On Floreana, the pointed craters in the path of the spotlight cast each one a long purple shadow. The highest peaks were still shrouded in whitening clouds, and the island had an appearance of content. It was an island not yet awake.

With the sun came the breeze, still from the west of south, and we had to breast the current also. It would be our last

windward work for a long time.

Just as we discovered the bay a beautiful fish struck our trolling white rag, and soon a shimmering blue and silver wahoo was on deck. The beacon of white painted fuel drums piled end on end showed us the way in between the lava reefs. An Ecuadorean flag went fluttering up a tall white pole to welcome us. There was a little dock, and a small boat at anchor. Hemmed in on both sides by black volcanic rocks curved a tiny yellow beach bordered by green. A little distance back stood a neat house. But the thing that interested me most was a barrel on the beach.

As the reader may know, the name of this bay is derived from the fact that the first establishment of any sort in the Galapagos was a sort of co-operative Post Office conceived by whalers who came around the Horn for voyages of several years in the Pacific. A barrel was placed on shore near the landing place and newly arrived vessels left mail here to be picked up by homeward bound ships. It was for many years customary to stop here for this purpose, obtaining from the islands at the same time a supply of the

famous giant Galapagos turtles which were looked upon as a great delicacy, and which, living almost indefinitely without food or water, provided a supply of fresh meat on the long voyages.

The barrel we now saw was a new one erected not long ago by the members of the British scientific expedition which called here in the St. George. But a few feet back in the brush I found a very old and weathered cask with the letters U.S. MAIL still faintly visible.

It was the last remaining trace of what was probably the world's most romantic postal service.

Before leaving I put in the modern barrel some mail for home, curious to see how long it would be before someone would look inside and perhaps start it on its way to America. It so happened that my mail followed in my tracks a couple of months later on board Cornelius Crane's brigantine *Illyria*, on a scientific cruise to the South Seas. Dr. Moss of Boston, one of the members of the expedition, found the mail, and posted it upon arrival in Tahiti.

The Norwegian Urholt welcomed us to Floreana. He was

The Norwegian Urholt welcomed us to Floreana. He was of great assistance during our short stay. He and two peons who work for him are the only souls on the island, and I believe they too have gone by now, for he was only waiting until some time when a boat should arrive to take him off.

We stopped in Post Office Bay to stock up for our long voyage. Like the old whalers we were looking for fresh meat and fruits. With Urholt's assistance we were quite successful. We made an all-day trip into the mountains to kill the meat and find fruit, and returned exhausted but plentifully supplied after the hardest day's work I have ever done.

It may sound quite ridiculous to speak of the difficulties of hunting wild pig, or wild cattle, but under Galapagos conditions a more strenuous sport could not be devised. With the help of Urholt and his dog we got our wild boar and our steer. We also found plenty of lemons, very sour oranges, and avocado pears. Urholt supplied us with enough 'bacalau'* to last to Tahiti. We already had on board two full stalks of ripening bananas and a sack of new Galapagos potatoes — little things the size of golf balls but very good. It was the off season, or there would have been more fresh things available.

The last day was spent in going over the whole ship in a final inspection. Shrouds were set up, new serving was put on where needed, halyards were turned and lacings gone over. The moss and barnacles were cleaned off the bottom. Soon everything was shipshape and we were ready for whatever the Pacific had to offer.

It was the eve of a great adventure. I stayed up long talking with Urholt. It would be weeks before we would see anyone and we would be nearly 4000 miles away. Inwardly I was seething with suppressed excitement, and I suddenly realized that the Galapagos had lost their charm. Tahiti was the loadstone now, and all my thoughts were directed towards getting there. There would be no jogging along comfortably on this trip. It would be drive, drive, and if the trade-wind blew fair and strong we would make our landfall by New Year's Day. I was very optimistic and confident that we would break all small-boat records.

December 6th dawned cold and cloudy as usual. Curiously enough, with all the excitement of leaving, I slept like a child all night long and until 7 o'clock in the morning. There was no sun. I decided to wait until I could get some good sights so as to check my chronometer against the known latitude and longitude of Daylight Point.

At 2.30 P.M. we were still waiting, but as the sun showed signs of coming out from behind the clouds we got up the anchor and began to creep out of the bay. We bade a last farewell to Urholt. He stepped into his boat and was rowed

^{*} A very good sun-dried fish.

ashore by the two natives. He stood lonesomely on his little dock and waved us out. We at least could go where we pleased, while he must stay there until called for — rather an indefinite business to say the least. The sun shone persistently on a mountain peak but refused to come where we were waiting.

It was getting late. Soon it would be too late for sights, and we would have to go back and wait for another day. Then, at 4 o'clock after we had sailed back and forth under Daylight Point interminably, the breeze whipped around to the south, the sky cleared as if by magic, and I took a string of sights under perfect conditions. When they were figured out I was able to deduce the error in the chronometer. It was large enough to have played havoc with a landfall three or four weeks later on a Tuomotuan atoll with a visibility of half a dozen miles.

Floreana, a dim grey mass of peaks, faded slowly from sight, and we looked ahead to where Venus shone, offering us guidance for many weeks to come. The sky was intensely clear except for a heavy mass that hugged the rim of the earth to the north. The horizon seemed infinitely far off. There was a light breeze, a gentle swell, and it was cool.

We were at sea.

Before me on a page in my work book was the figure 89. This represented the distance we had progressed from Galapagos toward Tahiti to noon of the first day out. Mechanically I deducted approximately the distance to Tahiti, and found that there remained 3699 miles. Next I took a dividers and pricked off the 89 miles on the course line which I had previously plotted. Carefully I drew a tiny circle around the pin-prick I had made.

I sat back and gazed at the result of my work.

A small fraction of an inch from Floreana, near the right hand edge of the chart, was the spot that represented our position. Several feet away, near the left hand side of Sheet No. 2 of the South Pacific Ocean, lay Tahiti. To all intents and purposes 3611 miles was just the same as 3700. Relatively speaking 89 was a negligible quantity.

Suddenly, for the first time, I awoke to a full realization

Suddenly, for the first time, I awoke to a full realization of the enormity of the task ahead of us. Infinity, the old familiar term of geometry days, took on a concrete mean-

ing. It was the distance to Tahiti.

I felt a sudden panic. I felt as a bird might feel, starting out to wing a lonely way to the moon. It seemed impossible that we could ever reach Tahiti by putting end to end on the chart distances such as I had just plotted. Surely no man could have the colossal confidence to try to harness the forces of nature and compel them to carry him across this vast distance. I thought of the early navigators setting out in their frail craft on unknown seas, and of the Polynesians migrating over the entire Pacific. They did not even know what lay beyond and feared legendary monsters. The sea might stretch away for ever, or drop away into a universal

it heaved a sigh, rolled over, and soon assumed the deeper and more powerful breathing of a man at work. It held well in the south for the first thousand miles, then gradually worked around to the east day by day as we neared the Tuamotus, so that by the end of the second week's run on December 20th, when we were 1847 miles out, we gybed over to the starboard for the first time.

To one who had received his cruising experience beating about the Great Lakes, knocking up and down the Atlantic coasing the North and Roston and working the coast between New York and Boston, and working the miles oies to Bermuda, this business of sailing thousands of trim of the the same course, with but a slight change in the thing, even sails from time to time, was a most astonishing preconceived mough I had long looked forward to it with a ally, it is impossiental idea of what it would be like. Actugoing it oneself, the to picture the feeling without underone would upon a had afterward I looked back upon it as ceeded all expectan dream - a dream long desired, that exlost as dreams are gations, and that afterward was vaguely measurable quality. first to be. Time took on a strange imbeen at sea, that there We had a feeling that we had always sky and water. sky and water — and he e was no world — except our world of rolling along over the chat we would go on for ever like this, Galapagos, Panama, he sea with the swing of a poem. The a past forgotten life. And tome — all were but a dim memory, same time, after two we dincongruous thought—at the very than it had at the end of s I leks of it the time seemed shorter was no feeling of wearings as

was no feeling of wearines to the first twenty-four hours. There A growing sense of antibels or boredom. is there in life more sweef t cipation took hold of us, and what surely as delightful as the adwit than this? The anticipation is here, I think, lies perhapsical tual realization of a dream. And holds the sea has upon those one of the strongest tangible crossing it in sailing ships.

we were from her. This gives us what is called a 'position line' and if we take a map with the streets and avenues to scale and draw this line, the point at which it crosses 35th Street is our exact position.

If there were two dirigibles in sight we could get a position line from each of them at the same time, and since we are somewhere on each line, our exact position must be the point at which they cross each other when drawn on the paper. This would correspond to finding position at sea from two stars.

Astronomers have calculated the movements of the various heavenly bodies: the sun, moon, stars and planets. The Nautical Almanac gives you the result in tabular form so that you know the exact position in the skies of the bodies you observe, as you know the exact position over the city of the Los Angeles. The surface of the world is marked off in lines of latitude and longitude, which correspond to the streets and avenues. So, knowing the exact position of the heavenly bodies, you can calculate from angles your position in relation to theirs, and plot it on your chart.

This all sounds very complicated. Formerly these calculations had to be laboriously performed each time by the mariner, but modern science has simplified matters. It is now possible to read your results from tables instead of doing the work each time.

A great deal of mystery has been connected with navigation for a long time. This has been fostered by many navigators as a sort of trade secret, to make them appear especially clever in understanding it. Actually, anyone with a common school education and a moderate amount of intelligence can learn to navigate easily to-day due to the elimination of logarithms and higher mathematics from the calculations. A great deal of experience is necessary, however, before one could safely navigate the ship—due

more to mechanical and practical considerations than to theoretical ones.

Thursday, Dec. 13th. Noon position: 4-57 south, 105-15 west: Run 188 miles. This is a red-letter day for Svaap. The longest day's run in her history was torn off with a wonderful trade-wind that blew half a gale at times and gave us an average speed for the twenty-four hours of 7.83 knots. This is just about the maximum sustained hull speed possible with as small a ship as this.

There was a large sea on the port quarter which helped us along. The run was made with squaresail and jigger, and brings the total for the first week, which ends to-day at noon, up to the remarkable figure of 921 miles. I remember a week in the Gulf of Panama when our total was less than the distance we made in the last twenty-four hours.

There was a new moon last night — a slender crescent — blue in colour. That must have been the cause of our 188-mile run. It could only happen once in a blue moon.

Also with the new moon came warmer weather. We had been wearing all the clothes we could muster, and on night watch I wore regular clothes plus a lumberjack shirt, coat, slicker, and then wrapped up in a blanket. The water, which had been cold from the Humboldt Current, has now warmed up, and we have hopes that this may yet turn into a tropical cruise instead of a misplaced Arctic one. The weather seems to have changed generally, for we are now beginning to have much more sun, and fairly clear nights, whereas heretofore it has been cloudy practically all the time. Luckily for my navigation it always seemed to clear for a few minutes at about 10.30 in the morning.

Sunday, Dec. 16th. Noon position: 6-49 south, 111-15 west. Run 132 miles.

Under square and jigger, with light SE. by E. breeze, and some left-over swell, until after sunrise when the breeze hauled more to the south as usual and strengthened so that the mainsail was put on her.

I am learning a bit about the stars from my constant contemplation of them each night from 2 a.m. to dawn. Claude Worth's book on Yacht Navigation and Voyaging was the means of most of the first identification.

Parted the wire jigger topping lift yesterday, and rove a temporary hemp one to last to port. These lifts take a recurring strain, jerking the life out of the strands when properly used, thus preserving the life of the sails. Also parted both squaresail sheets in the last twenty-four hours, but they were old worn jibsheets. This jib-headed ketch rig is remarkable in the absence of wear and chafe. Having something part is such a rarity that it becomes log-book material.

This is the tenth day, and we have made 1290 miles—one third of the way. Graduated to sheet No. 2 of the South Pacific.

It is always concrete evidence of progress to start on a new chart and gives us quite a kick: 1760 miles to Fangahina and 555 more to Papeete. We will take the southern passage through the Tuamotus used by Cape Horn vessels, for it seems to me we are more likely to get better wind there with the trade less broken up, and as this is the hurricane season, such as it is, I would rather be in that vicinity than up near Takaroa.

We have noticed a strange phenomenon about which I am going to write the Hydrographic Office. Each day for a few minutes just at sunrise, and again at sunset, there are much larger seas than during all the rest of the day. They start abruptly, last but a short time, and the sea returns to its former state. I have thought of several far-fetched reasons, but nothing that seems logical.

Another daily occurrence is the arrival of our specially

trained troupe of dolphin. Each night just after dark, a large school of these playful mammals arrives, and for half an hour or so we are entertained by their antics as they leap and plunge close to the boat.

The flying fish dart about all day long now, but rarely come aboard, contrary to general belief. We would certainly starve to death depending upon them for food. It is untrue that they fly only into the wind. I have seen them shoot out at any angle to the wind, describe complete circles in the air, and actually saw one loop twice for some reason known best to himself. Studying them closely it seems that the wings vibrate very rapidly when in the air. The larger ones, twelve to fourteen inches in length, have a hard time getting out of the water sometimes, and do not seem to have the control the smaller ones have.

Thursday, Dec. 20th.—Noon position: 9-44 south, 120-05 west. Run 122 miles.

Thus ends our second week's run, wherein we beat the first week by five miles, making 926 this time, bringing our total for two weeks up to 1847 miles or an average to date of 132 miles per day. This is more than I thought a small boat would do over a period of time, but we are driving her every minute.

I think we have come to the end of our perfect cruising. Last evening the wind slowly but surely dropped and backed toward the east and settled there, too light to fill the squaresail which as a result banged away in a very trying roll all night. We made poor time and for the first time slept very little. At 8 a.m. the breeze freshened in the east, but the bad roll continued. We can expect easterly winds from now on, quite a disappointment after the wonderful beam and quartering breezes we have had so far. I have found it unprofitable to go dead to leeward, and will alter course just enough to bring the wind a little on the quarter to make both the jigger and squaresail pull well. In the

long run we make better time this way even though we sail a longer course, for the ship sails both faster and much more comfortably when not dead before it.

Saturday, Dec. 22nd. - Noon position: 10-56 couth.

124-17 west. Run 142 miles.

Breeze wavering between N. and E. quite uncertain in strength. It is not as good as was the old one from the SE. There is a rather difficult sea for a small vessel due to the meeting of what seems to be a permanent swell from the SE, with the new sea from the NE.

Saw the first longtail, or tropic bird to-day. Every day new birds, although we are still about 900 miles from the nearest land. We have had hirds with us all the way across, proving that they can stay at sea indefinitely.

Sunday, Dec. 23rd.-Noon position: 11-39 south, 125-45

west. Run 95 miles.

This is the first time since leaving Floreana that our day's run has dropped below 100 miles. Our standard rig these days is the squaresail and jigger, and we continue to follow the policy of sailing as near to our course as we can and still keep them both drawing properly.

Monday, Dec. 24th .- Noon position: 12-19 south, 128-26

west, Run 149 miles.

A wonderful trade all the last twenty-four hours from about E, by S, with quite a big sea so that now and then one breaks over the rail. During my watch below I got one right in my berth, perhaps half a pailful, the first time that has ever happened. We never even keep the hatch covers on, for Svaap is the driest boat ever built, I am sure.

Last night we had the first appreciable rain we have had since leaving. Anyone out here without water could get very little from the sky. We seem to use all the water reasonably necessary to cook and wash with and yet we do not exceed our quota of a half gallon per day per man. Checking the supply each week I find that the quantity used always comes

to about seven or eight gallons altogether. We are getting quite foul along the after part of the bottom, deadwood, bilges, and rudder. The trouble seems mainly to be a strange species of barnacle, soft, almost transparent, jelly-like, and shaped exactly like the black cloves one finds in pickled things. The moss also grows rapidly near the water-line.

Queer, how perspective changes things. Here we are, more than 700 miles to our first landfall, and rejoicing at being on the last lap—the home stretch. Six months ago yesterday, as I set a course for Bermuda, 680 miles away, it seemed like a voyage round the Horn. Now the same distance seems a mere trifle.

Tuesday, Dec. 25th.—Noon position: 13-22 south, 130-05 west. Run 130 miles.

Light easterly to north-easterly breezes. Can't understand the good run, as dead reckoning showed twenty miles less. Probably the hard trade of the previous twenty-four hours accounted for a strong westerly set.

Showers again in the night. Some swell, but not bad.

A strange place for Christmas this! I sat on deck last night as the sun went down and the moon took charge with little less brilliancy than its peer. Great white clouds drifted across the sky. We pointed our bow to Venus, our guiding star Reddish Mars shone astern, and near by was Orion in all its glory, and later the Southern Cross. We lifted and fell to a following sea. Our two tropic birds, which have stayed with us most of the time lately, circled overhead and spoke to us, and the wake gurgled astern like a brook. It was natural to talk of home, for this was Christmas Eve, but soon we were silent. In the presence of such perfection of night one is not encouraged to talk.

I took the helm at 2 a.m. and soon it was Christmas Day. It came suddenly, as Sirius faded ahead and clouds turned pink. Then great rays of the yet hidden sun shot out high

in the sky like the borealis. One moment everything was the deep purple of dawn — the next the sun had risen and the sky was already that lovely pale blue of the tropics the clouds white ships sailing westward with us.

As if nature thought it wrong to sail on Christmas Day, we were later becalmed for the first time, and for a wonder had a marvellously calm sea. We were able to really swim free instead of being at the end of a rope. The water was so clear we could see every detail of the underbody and keel, and many fathoms deep. We rested and read; saw porpoises for the first time, and schools of what appeared to be large bonita, a distant whale, and even more birds. It was very evident that we were nearing land. And so the day passed, à strange Christmas but one never to be forgotten.

It was two days after Christmas. We were still in a region of unsettled weather and were making poor progress. It could have been the Gulf Stream during a squally period, only these squalls were of a different type, much larger in extent but usually containing less wind. They were not as abrupt either, the rain and wind gradually working up to strength and taking perhaps an hour to pass. The day before, after having made but small headway, and that only on the breath of several large squalls, we had watched the day go out to a dramatic curtain. The sky had a threatening appearance, with here and there great squall clouds coloured by the sunset, several sundogs, a couple of waterspouts writhing their way along a mile or so distant, and a strange borealis effect in the eastern sky. The moon, not yet up, and some unusual atmospheric condition may have been the cause of the weird wavering colourful bars and figures which danced on the horizon.

As I sat below at the table plotting my noon position, I suddenly had a feeling that something was wrong. A glance

through the companionway quickly changed my uneasiness to alarm, for there, directly behind and coming rapidly up to us, still in the first throes of birth, hung the largest water-spout we had ever seen. Its long black tentacle, suspended from the lowering tumultuous mother cloud, writhed and groped half-way to the sea, like the arm of a Gargantuan octopus seeking a grip upon an enemy. Our eyes clung to it fascinated as it reached down and down, sometimes retreating but always growing again. There became audible the distant roaring or sighing sound that first warns of approach to a waterfall when travelling downstream in a canoe. Underneath, at the surface of the sea, the sympathetic disturbance suddenly became more intense as the incipient whirl revolved faster and faster, throwing off bits of foam and loose water. A distinct bulge in the surface appeared, as if sucked up by the parched column above, and rose higher every second. The spray and foam now began to be snatched upward, and before our eyes was formed a vapoury connection with the descending tube, linking cloud and sea. The connection established, more and more loose water shot whirling aloft, and the disturbed area at the base grew larger and more violent as it received the too heavy particles thrown away from the column by centrifugal force. The noise and tumult grew as the hissing of the column, the cry of the wind, and the crashing of the waters blended to form a fearsome roar. Augmented by more and more water the lower half suddenly reached maturity and groped out to clasp hands with the upper, and the sea and sky were united by a spinning, weaving pillar of water.

The spout, moving slowly, reared itself higher and closer to our stern. Close enough now to be in the area of disturbed wind, our squaresail began to strain at its sheets and we gathered speed momentarily and seemed to be holding our own with the black twisting column, contact with which would have been disaster.

There has long been a somewhat superstitious belief among seamen that the firing of guns at a spout will break it up, and there have been cases where this has possibly proved efficacious. It is somewhat logical that the concussion of a heavy shot might break up the spout, but it is certainly almost impossible to expect a small gun to have any effect. Before I had finished loading my gun a sudden change occurred within the spout. The writhing increased and a weakening appeared half-way between cloud and sea, and this part became more and more tenuous until there was a gap that grew larger as the lower half bored its way back into the sea and the upper part withdrew slowly to the boiling lower surface of the cloud.

The black curtain was now directly overhead, and we were struck by a short-lived wind and rain squall of great intensity. We had been running under squaresail alone, and had held on to it in an effort to escape the spout. Now there was no time to get it off, and we tore through the water faster and faster, until the bow was high out of its proper element and the stern nearly under. Svaap travelled for a short time faster than I thought would have been possible, and water fell in such quantities that it was impossible to breathe without protecting the face. We held her before it and careened madly along for perhaps five minutes, expecting the sail to pull out of the boltropes at any second. But everything held, and the wind shifted from east to north as it always did after squalls. Gradually it subsided and at last worked back to east again and we jogged slowly along on our course as if nothing had happened.

The sea has given us many curious and awe-inspiring phenomena, but certainly there is nothing else that has the appeal to the imagination that is presented by one of these sea tornadoes. It is no wonder that the ancients endowed the waterspout with supernatural qualities and gave it a foremost place among the demons and dragons of mythology.

The Arabians, for instance, as readers of the Arabian Nights will remember, regarded it as a manifestation of the Jinn, or Spirit of Evil of the waste places. One early writer said in describing it, that 'A great black dragon is seen to come from the clouds, and put its head into the water, with its tail in the sky; and the dragon drinks up the waters so greedily that it swallows up any ships that may come in its way, along with their crews and cargo, be they ever so heavy'.

Various superstitions came to be associated with the waterspout, and early sailors utilized many strange ways of dispersing or frightening away this awful demon. Religious charms took foremost rank among the methods used, and were helped by making the sign of the cross, and on Columbus's ships, for instance, passages from the Gospel were recited. Pliny advised waiting until the creature came within reach and then dispersing it by sprinkling vinegar, 'a substance of a very cold nature'. At other times the thing was combated by producing great noise by whatever means was available, striking bells, blowing whistles, clashing of cymbals, or merely shouting. The modern belief that it is possible to break up the waterspout by the firing of guns is more reasonable. Almost two and a half centuries ago Dampier wrote of waterspouts that 'Men at Sea, when they see a spout coming, and know not how to avoid it, do sometimes fire shot out of their great Guns into it, to give it air or vent, that so it may break'; but he adds that 'I did never hear that it proved to be of any benefit'.

There has been much discussion as to the actual danger

There has been much discussion as to the actual danger attached to this phenomenon, but when one considers the heights to which the spouts rear themselves — they have been reported up to a mile — there seems little doubt that a good sized one would annihilate the small craft with which it came in contact.

Inasmuch as we were for several days in a region of

incipient spouts, with often as many as two or three score of them in sight at once, it can easily be understood that we soon were sufficiently intimate with them to quench our

curiosity.

The squall clouds marched down upon us from the eastern horizon like a disorganized army fleeing the enemy, and a larger mass of them might have as many as a dozen tentacles groping toward the sea at one time, ranging from little ice-cream-cone pendants to full-fledged vortices that drew up the sea to the bosom of the cloud and roared out the challenge of their short existence.

For us the days were a curious mixture of optimism and pessimism. A last swarm of squalls would seemingly sweep the sky clean, and the trade would heave a sigh and steady itself down to a comfortable sailing breeze. We too would heave a sigh and prepare for a resumption of the heretofore perfect weather, when suddenly 'a cloud no larger than a man's hand' would peek over the rim of the world and see us rejoicing. 'What Ho!' it would say. 'This will never do,' and in a few minutes it would gather some of its brethren, and before the sun could even dry the decks from the last downpour the pretty little specks of white mist would have transformed themselves into great lowering tumbling black masses of spout-fostering cloud that would cast an ominous pall upon the sea.

The 'valley of marching spouts' we called it, and were glad when we were out of it.

The days continued to pass with their usual rapidity. Our familiarity with the squalls and spouts bred if not contempt at least a toleration, and we carried on our usual routine. We rigged a poncho shelter over the cockpit and were not too uncomfortable in the squalls. When the sun shone and became hot we plunged overboard, holding to the end of a rope, and were towed through the transparent waters

at an exhilarating speed and investigated the rapidly multiplying growth upon the bottom of the boat. It was remarkable to see queer rubbery barnacles, and grass, growing and spreading while we were making good progress through the water all the time. They seemed to flourish better during the voyage than they did later while Svaap was anchored for weeks at a time in lagoons in the islands. We swam in this manner all the way across, two or three times a day sometimes, and while really at sea never saw a sign of sharks or anything that might bother us.

There was time for reading each day, and for browsing about in the Pilot Books looking for strange places to go when we should be among the islands. We were not making the time that we did the first 2000 miles or so, but each day cut down the mileage that remained to Fangahina, which I had definitely settled upon as a landfall, and we exerted all our efforts to make it by New Year's. Fourth of July in Bermuda waters, Thanksgiving in the Galapagos, Christmas at sea in the middle of the Pacific—all that remained to make it complete was to celebrate New Year's in the Tuamotus, and we counted off the miles as do children the days to vacation-time.

Then suddenly something occurred to disrupt the evenness of our tenor. The fuel for our wood stove was gone. This had been expected, and we had the Primus to fall back on. We found the old burner to be no good, and I hauled forth my package of spare parts and produced an entire new vaporizer and burner. But alas! For all my foresightedness in preparation we were without a stove. The factory had failed to braze the joints and the vapour oil escaped before reaching the burner. Solder would not stand the heat and we were without means of welding. We could always stop in the Tuamotus for firewood, but I did not care to do this. My heart was set on carrying through to Tahiti to make the mail boat. As a matter of fact we made out all

right, for by using all sorts of scraps of wood — even the bosun's chair went to cook a meal — we managed to cook once each day in the wood stove up to the very last.

Noon on the last day of the old year found us ninety-four miles from Fangahina, having made one hundred and ten miles during the preceding twenty-four hours. Something had broken the spell. The night before we had scratched the mast and had put a knife in the mizen, and with the beginning of the first night watch there had been one continuous squall for an hour, and after lasting two hours more, lo and behold, the sky cleared, the stars came out, and a fresh easterly trade-wind came piping along and still held.

No one who has not sailed across a vast ocean in a tiny craft, a month out of port, can realize the excitement and air of expectancy that prevails as land is neared once more. How we welcome the land birds that find their way out to us the last day or so, and the renewed glimpses of fish. Even the squalls are easier to tolerate for they show the proximity of the land. And the navigator — how he aches to make his landfall on the minute and wonders how much the chronometer is out from its figured rate, for upon this everything depends.

Going under the assumption that there was some error in the time, I had planned our course so that we arrived at a point due east of Fangahina the night before landfall, and thus could sail due west and hit the spot sooner or later than the figured time, according to the error in the chronometer. If it was slow we would get there sooner, one mile for each four seconds error. At 6 p.m. on the last day of 1928 we had only sixty miles to go according to two evening sights. We were twenty-five days out, but surely the chronometer could not be hiding an error of more than a minute on the calculated time! Assuming it to be correct we should be within sight of the island at 4 a.m. provided we held the same speed. There would be bright moonlight then.

Fangahina is just a beach and some coco-nut trees — only a few feet above sea level and thus visible only half a dozen miles. A tiny bit of land to find.

The year was waning. My Dream Ship slipped peacefully through the silver sea and left a luminous wake, and the squaresail shone in the moonlight. What, I wondered, had the New Year in store?

Dawn, January 1st, 1929. A pair of eyes at mast-head, and a pair on deck, both staring through the grey at an empty ocean. Pink tinged the grey. The long Pacific swells rolled under us, made a momentary bulge on the horizon ahead, and were gone. Then there came one which rolled out of sight, and wonder of wonders, the bulge remained and became a fringe of palms. Our New Year had begun.

A half hour later, as the freshening breeze put whitecaps on the sea, we ran past the little atoll and feasted our eyes on the intense green of the palms and the yellow of the beach. Here were colours that we had not seen for weeks, nor had we ever seen the white cresting foam of breakers such as these, nor listened to such thunder as they mounted higher and higher and crashed upon the little ring of coral. Inside, through the palms, we saw the mirror-smooth blue surface of the lagoon. This was the perfect atoll of fiction, a narrow strip or ring of beach and palms encircling a placid lagoon, that proffered invitation but whose invitation could not be accepted for there was no pass.

Our glimpse was all too short, and then we changed our course to SW. to run for Reka Reka, 112 miles distant. This enabled us to put up the mainsail and jigger and still use the squaresail too, and to make our four or five knots with only a very light breeze from the east. The 1929 Nautical Almanacs had not been issued when I left Panama, and so I was obliged to start recalculating the material in the old one when taking sights later in the day, and for the remainder of the voyage. The wind worked a little to

the south of east and gradually increased so that by evening we were doing seven knots under square and jigger. The square was clewed down to the bowsprit so that the sail was like a great misshapen balloon jib that nearly lifted the ship from the water as we fairly flew along.

After nightfall the wind increased still more, but became squally, so that the sky was clear one moment with stars blazing, and covered the next by black clouds that raced over and dropped their contents as they passed. The squalls seemed to be preceded always by two or three queer steep seas that gave the boat a strange lift, like a fast elevator.

By midnight we were blasting along on the howling wings of a heavy endless squall, doing at least eight knots. In the observance of due caution we should have reduced canvas, but with a godsend such as a wind like this to drive us through a region where we expected calms and light variables, and the urge to make port after almost a month at sea, we carried on and took a chance.

The Tuamotus are referred to as the Dangerous Isles, or the Dangerous Archipelago, and well they might be. The atolls, some eighty of them, are strung out in a chain a thousand miles long and with most of them the visibility is hardly more than a mile or so. They are surrounded by currents of uncharted direction and velocity. And so, when

I saw that we were going to make Reka Reka by night I alter could course to pass a safe distance of some fifteen to twent gured tito the north of it. In this way we could not possible as slow whom any of the other atolls until after daylight. In though erroln hour or so before dawn there was a sudden sixty miles surf dead ahead, and up loomed an island. It wenty-five ready in the surge that precedes the breakers. The hiding anist time to get the mainsail on, sheet the squaresame! Assume ar away to the south. We passed the point of the islanc close that we could see the coral itself. itself. There would

88

We were in a quandary and could not explain the island at all, and when it was daylight we were out of sight of any land. I held a tentative SW. course while the sun tantalized us by staying behind clouds so that observations were impossible. Later on, from the mast-head, we made out a long chain of tiny islets ahead which might have been either the Marutea or Hikueru group, depending upon which way the current had set us. The sun came out and we were more at a loss than ever, for the observations put us in an impossible position, due to some strange condition of the atmosphere, probably undue refraction from the intense evaporation going on in the countless lagoons about us. At noon a good latitude sight showed that the low atoll group we were abreast was Hikueru, and by working our course backward I found that the island we had nearly run into in the night was Reka Reka after all. A current had set us almost twenty miles to the south in twelve hours.

The little islets of the atoll ran in a broken chain out of sight to the west, and a two-masted schooner lay beached on the lagoon side of the eastern end. We ran in very close to the village, just outside the breakers, and all the people rushed about on the beach expecting us to stop. A red church steeple showed above the palms, and an empty flagstaff. A brand-new-looking Ford scurried among the palms, the most incongruous thing I had seen in a long time. It could go only about a quarter of a mile and then was obliged to turn back or run into the sea. So it darted back and forth like a mouse trapped in a box as long as we could see the island. Then a heavy squall completely veiled the group, although we were only a few hundred yards off, cleared for a moment and we had a glimpse of the lagoon, and the curtain was drawn again.

We now had practically clear sailing ahead of us to Tahiti, and only 390 miles to go. Luck had been with us in getting by the Dangerous Archipelago, for we had

romped through in thirty hours instead of being delayed

by the calms I had expected.

The next land we saw was the steep little island of Mehetia, sixty miles east of Tahiti, and when dawn came on January 6th, the great bulk of our goal loomed fifty miles distant, shrouded in haze and clouds. All day we gazed upon the astonishing mountains and gorges that grew ever larger and more spectacular ahead of us, while our breeze gradually deserted us and our hearts sank at the thought of another night at sea, and so close to port.

And then just at sunset our guardian angel sent a land breeze out to us laden with perfume. We approached the land and got within its protecting influence. We had the almost forgotten sensation of sailing in smooth waters.

There are no smooth waters at sea.

Point Venus light, where Captain Cook made his famous observations, shone out for us, and all along the great barrier reef lights twinkled to guide us along the shore. We, pondered at these reddish twinkling lights, and later found that they were the natives torch-fishing along the reef.

We ghosted along within sound of the surf, looking for Papeete, and suddenly there it was - a crescent of tiny lights. Becalmed directly off the town we unshipped the squaresail yard, unbent the sail and stowed it below. For a month this sail had been off but once, and then only thirty hours. It was worn. The yard lacing was temporarily patched in many places. The sail itself was practically blown out of the boltropes half the way around. It would have to be almost remade before it could be used again. But if anyone should ask me I should say it was SOME sail.

Tahiti is entirely surrounded by a barrier reef which lies anywhere from a few yards to a half mile or so from shore, upon which the sea almost always breaks heavily. There are passes here and there through which vessels may enter, but

stroing currents make caution necessary.

The Pilot Book says of the Papeete pass that one must take a pilot and enter by day. But there are two red range lights on shore that make it possible to come in at night, and I had a good chart of the harbour. We had been at sea just a month and had sailed 3700 miles. The twinkling lights were a magnet that was irresistible.

So just after midnight we found the pass through the reef, brought the red lights to bear in a straight line, and ran in with the thunder of the surf on both sides. Once in the fairway along the shore we turned sharp east and slowly glided along the famous Papeete water-front, to tie up to a buoy in the inner harbour just off the government dock.

The air was heavy with the scent of lovely flowers, and there were strange land noises. We could hear a milkman making his way about town, and soon all the sounds of a community awakening. Birds, dogs, cattle—it was all so strange to us. I put up the quarantine flag and gave myself over to the ecstasy of it all—the glorious feeling that comes only at the end of such a voyage—a feeling of utter relaxation and peace, and of accomplishment.

CHAPTER VI

ONE might almost say that Tahiti is inhabited by men who came for a vacation and stayed for ever. That is, of course, speaking of the white population. As for myself, I stayed eight months and was filled with regret when I finally watched the towering bulk of Tahiti and its sister island Moorea fade into the dusk of evening as we sailed out to sea again.

Twice Svaap was hauled out in Ellacott's little Tahitian shipyard for painting and overhaul. She emerged from her metamorphosis a glistening white, the only practical colour for the tropics, and sported a new after-cabin in place of her old cockpit. I had long wanted to do this. The fairly large cockpit, desirable for ordinary sailing, was only a waste of valuable space for us. So I tore it out and built in a little after-cabin which gave me a great deal more storage space and separate quarters for my crew of one. It left us a small steering well between the two cabins. The arrangement proved so successful that I would never have a cruising boat again without it.

The days spent in the little shipyard were pleasant, for Ellacott proved to be the most conscientious shipyard man I have ever met. Born of a half-caste Tahitian mother with a bit of both Griman and Italian blood, and an English father, he was more Tahitian than anything else, as was his massively proportioned, kind hearted wife. In the evening the whole family would gather in the little coco-nut grove next to the house and tell me of old Tahiti. Daudet the son would climb a palm for drinking nuts, and the girls would sing the age-old chants that told of ancient rites and deeds:

accus.

One naturally develops many passing friendships on a trip of this sort. Tahiti was no exception. I had soon made many friends, all of whom I will remember as having been very kind. But fortune gave me something better yet, one of those rare lasting friendships that one will travel far and wait for years to find. Far around on the south side of the island, away from the hotbed of intrigue and gossip in the lazy little town of Papeete, lies the loveliest spot in all Tahiti: Te Anuanua, or 'The End of the Rainbow'. Here, nestling among a beautiful grove of palms and surrounded by the loveliest of tropical and imported flowers and birds, my American friends have built themselves a luxurious elaboration upon the native type of home, and have succumbed entirely and completely to the charm of Tahiti.

The Guilds were fortunate enough to find a place with a marvellous lagoon and a good pass, just off Maraa Point, in the district of Paea, and there they have built themselves a long concrete pier to house their boats. With a twin-screw 30-foot fishing launch, and several small sailing punts to keep them on the water almost all of the time, they live a Utopian life on their island paradise.

The general impression seems to be that when white men go to a tropical island to live they automatically degenerate. This has resulted from the fact that many men of weak moral fibre, attracted by rumours of a life of indolence and ease, with all of life's necessities and pleasures at one's finger tips, have gone to Tahiti and similar countries to waste away their lives. The fact that they have gone to the devil in these places should not damn the islands. They would have gone to the devil anywhere—only it was easier here.

A man of character can go to the tropics and live as active a life as anywhere else if he wishes, or he can retire to a smooth-flowing life of tropical languor that would be

impossible elsewhere. In either case there is no excuse for

degenerating.

My friend Dr. Lambert, of the Rockefeller Foundation, has lived for years in the Western Pacific doing medical research, working actively all the while. It would be ridiculous to suggest that he has degenerated.

Colonel Clay of the British Army retired years ago to live in Tahiti. Without the stimulation of an occupation he still lives actively. His days are full, and his interest in

the things about him thrives more than ever.

I could give many more examples—just as I could give innumerable cases on the other side, where men have wasted their lives in a round of drink or debauchery. But it all comes down to the same thing: As water seeks its level, men will seek theirs, be it in a temperate or a tropical setting.

Svaap made her headquarters for six months at Te Anuanua, leaving now and then for a short cruise to Moorea and neighbouring islands, or for exploration of the always entrancing shores and harbours of Tahiti. Always she came back to the home mooring at Maraa. The delightful little guest-house was at my disposal, so when in port I moved ashore to live beneath the ever-mysterious palms. A great mango tree protected the front of the house, and I picked avocado pears from my back porch. Green rustling banana plants lined the far side, with vanilla vines at the back. A wide veranda looked out past hibiscus blooms through the sighing coco-nut grove and over the lagoon where Svaap lay. Outside on the rumbling reef I could see the white fountains shooting skyward as the everlasting sea battered the coral. Those great swells had come in unbroken freedom all the vast leagues across the South Pacific from the Antarctic. The sensuous perfume of the Tiare Tahiti blended with the delicious scent of the vanilla.

And so I became a landlubber for a time, and Svaap bobbed lonesomely on the lagoon, deserted, but glad of the rest after her 8000-mile voyage.

I came to look forward to the monthly mail day with its hustle and bustle of everyone in town, for one must go to town on mail day to wait around the Post Office or the Consulate, to sit and drink at the club, commenting on the tourists — how unusually mediocre and uninteresting they looked, and to hear all the latest scandal. One learned which native girl the wealthy young American was being seen with, and heard the rather lurid details of why one of the biggest and oldest of the trading concerns in the islands was going bankrupt. I became familiar with the price of copra and learned the jargon of the pearl trade.

On mail day we would also watch each lot of tourists do the same things, buy the same picture post-cards of nude Tahitian girls bathing in a waterfall (which they would not think of doing, except in the post-cards), and get a bottle of perfume from George Sage at his unique South Sea barber shop. We saw them return from their quick tour on the automobile road as far as Maraa, and we listened to their comments as they gathered to await the deepthroated blast that would call them back to the Makura, or the Maunganui, after several hours of the most utterly superficial and deceiving glimpse of Tahiti that could be devised.

They are disappointed. Middle-aged maiden school-teachers are disappointed because they came to be shocked at South Sea life and found nothing to be shocked at except perhaps that many rather attractive Tahitian girls wore bobbed hair and other accessories of flapperdom which have found a devious way to these islands. Two middle-aged salesmen are indignant because after several hours of vigorous searching for the traditional brown-skinned beauty of large affections they had found only a couple of profes-

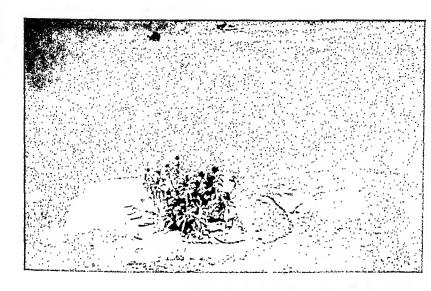
sional prostitutes that actually had the nerve to demand

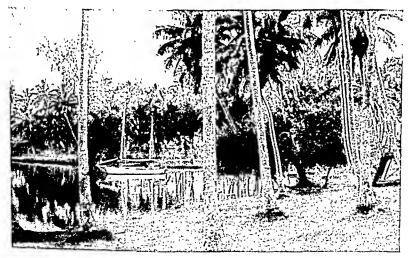
The Club of course was the place of places. It lost its usual flavour on mail day and assumed an air of excitement and tenseness. Alec—bar-tender extraordinary of international reputation—circulated from table to table overflowing with stories for the tourists who warmed to the heart at this glimpse of real Tahitian life, and bought another drink.

When the last transient had gulped the final Rainbow cocktail and fled, the Club resumed its customary quiet and the little cliques found their accustomed tables on the wide veranda, and disdaining the crowd of natives, half-castes, and lesser whites on the wharf, prepared to watch the steamer warp out into the fairway and get under way. Then Tahiti would be more or less normal until another mail day. I could no longer strut before the tourists with a knowing air, but as I leaned on the balcony and waved the departing ship off I felt as if I were one of the old islanders. Someone would ask me if I'd seen Turia; there was a moment's conversation with a planter I had not seen since last mail day; and on the way home I would know every bend and hill, every Chinese store; and the little cheerful Annamite roadworkers with babes at their breasts would wave to me as I passed and smile a betel-stained but friendly smile. It had come to be home, for a time at least.

It was a source of never-ending interest to me to watch the consings and goings of the little island schooners, and the Tuarnotu cutters, with their colourful cargoes of humans, cows, chickens, pigs, copra, pearl shell, trade goods, and so on indefinitely—all mixed helter skelter on a deck you'd swear would accommodate but a tenth of what it did.

Native feast's occurred with surprising regularity, and I became fond of the exotic foods that burdened the tables in astounding profusion, and were prepared in the native





Top: A coral island
Bottom: The Svaap in Tahiti

oven of heated stones in the ground. The simplest of feasts would always have its raw fish with 'mitihaari' or coco-nut sauce, shellfish and several species of variously prepared fish, poi of bananas or pawpaws or some other fruit, taro, yams, native sweet potatoes, fei (the local plantain that must be cooked), pota well soaked in coco-nut sauce, fowl, sucking pig, and fruits.

To the novice raw fish has a repulsive sound, but to the initiate there are few foods so delicious as this dish of cubecut fish that has been well soaked with salt and lime juice for several hours and is eaten with a generous bath of sauce. The pota, too, is a dish that once eaten is never forgotten. It is a species of greens — the tops of taro — and is cooked with bits of pork and chicken and perhaps onion, and develops a flavour that is peculiarly its own and delicious.

The native dancing never lost its charm. I had plenty of it for I happened to be there for the great festival that started on June 18th and lasted ten days, to be revived for another week on the French national holiday — July 14th.

During this period, and for a month previous when all the districts were practising for the competitive dancing, I lived to the accompaniment of drums and chanting, and spent the warm scented nights watching brown bodies sway beneath the palms by the light of the moon or perhaps a flaring smoky torch.

There were mountains to be climbed. Venturing into the deep valleys I would be rewarded by luscious oranges, and by the sight of sun-shot mist-veiled waterfalls. There is one fall, known to few, that is as beautiful a sight as I have ever seen. After a not too difficult climb up a valley on the far end of Tahiti, following the bed of a stream, I came to a deep rock-walled gorge. Here it was necessary to leave my clothes and swim — straight up through the gorge — on all sides surrounded by steep towering walls. Suddenly the canyon made an abrupt turn to the left and ended against

a perpendicular rock wall. From high aloft a wondrous fall poured its veil into the pool. It was so unexpected that I forgot to tread water and swallowed a mouthful or so of the cold crystal liquid. I swam over and clung to a boulder while the fringe of the falls beat upon my shoulders. The water was cold and I did not stay too long, but it was a sight I won't forget.

From time to time there came reminders of America: a batch of newspapers that held no particular interest, a visiting American yacht, an acquaintance with whom I could dig up mutual friends at home. But these served only to

put America more than ever in another world.

One day there came a much delayed and widely travelled letter addressed to 'Señor Don Captain William A. Robinson, Yacht Svaap (Dream)' bearing news from Karin in the Galapagos. It told of the doings of my pet honey bear.

'I have give him the name Dream, after your yacht,' wrote Karin in her broken English. 'I think he remember you still, because when I speak English to him, he stop quiet and listen to me as he remember something. He is a little more big now, and he be more and more sweet and clever for every day who pass. I have a little pretty house for him in which he is sleeping in the day and playing and climbing in in the night. That house is made especially for my little Dream and stay in my bedroom. But always when he wish, he have the liberty for go where he like. He is so tame that he not run away and he is grew so fond of me now, that he go after me in all the parts I go. Every day I go a little walk with him, and many times have he go with me all the way to the Plantage and back again. And when I some time for playing, hide me behind one big stone for he not shall look me, he begin to crying till he find me again, and then he is so sweet so sweet ... In the sunset, when I stop in the balcony and playing gramophone, my little Dream is balancing on the

balusters after the fact of the music. And one afternoon I also learned him dancing tango. So you see, after some years, if you come back again here, you shall look he is growing very clever and intelligent . . . This little Honey Bear have for me been a very great pleasure to have. and have given my life here more contents. . . .'

Brave Karin! I wonder how many could undergo the

Brave Karin! I wonder how many could undergo the hardships and disappointments that have been the lot of this twenty-year-old girl, and retain such courage and beauty of spirit as she shows. She deserves more than a honey bear 'to give her life more contents'.

I sat one evening on a bench on Papeete's water-front and watched the sunset clouds lowering themselves around Moorea, hiding its peaks in a mantle of white through which glowed the colours of the multi-hued horizon beyond. The island looked more than ever a fantastic stage setting rather than anything tangible and real. The crews and their friends were making merry aboard the little schooners that lined the quay. A native family grouped itself about my bench, the children playing in the water that lapped gently at our feet, while the women wove wreaths of Tiare blossoms and delicate little ferns. Two pareu-clad girls drifted lazily along in a dugout, singing to their own guitar accompaniment, and calling out to their friends ashore. Alec strolled past, to open the Club. Bicycles rolled by with girls who held down their skirts as they pedalled, a couple riding close, a man in blue jeans. Gay automobile parties passed, bound for the evening's fun. A truck filled with singing natives playing on guitars stopped behind me to watch the people on a departing boat — bursting into hilarious laughter as jokes were flung back and forth, for the Tahitian is an unquenchable person for ever bubbling over like a goblet of champagne with song and music and laughter.

The lights from the opposite half of the scimitar of

water-front began to throw their rays across the placid lagoon, and a cooler breath - the night breeze: from the mountains - tinged the air.

The Potii Raiatea, an island schooner, was sailing to-night and suddenly the anchor winch started to rattle las the chain clanked in link by link, starting a slow ripple of in the glassy

water.

On the next bench were two smiling girls, quite amused and sympathetic about my solitary appearance. 1 They begged a wreath from my neighbours and dropped it lightly over my head, running off laughing at their fun.

Venus, our old guiding star, shone out cher Moorea now, and I began to wonder if it were not tin he for Svaap to be heading westward once more. The greeken starboard light of the schooner suddenly came into beeing, blocks creaked. The ship was moving, her anchor aw eigh, and at last she went slowly ahead, then quicker, swuring and was headed for the pass and out to sea.

I felt strange urgings in me. It is always like that when " I see a ship sail - something sad, and something joyful too - but now it was more than that, for suddenly I knew that it was time for Svaap to leave too, and follow the sun still

farther to the west.

It was Wednesday, August 28th, 1929. The sun had not yet climbed above the towering mountains, but already a trace of vapour was rising from the surface of the lagoon. Slowly Svaap moved away from the buoy that had been her Tahitian home for so long a time — and so short. Our friends waved a last farewell. Resolutely I turned away and conned the little ship through the pass bound for Raiatea, in the Leeward Group. The departure seemed almost as momentous as that first one, long ago, when I had watched Long Island fade into the mist of night.

There was a new crew aboard. Bill had returned to his native Bermuda. First I had found a husky Fiji Islander eking out a homesick existence in Tahiti who wanted to go as crew in order to return to the land of his birth. He spoke all the Polynesian dialects and was a good sailor, so I accepted him quickly. A few days previous to sailing he arrived aboard with all his possessions, notably two spare pareus and a meek little Tahitian maiden of perhaps fifteen summers, modestly endeavouring to make herself unobtrusive behind the big Fijian's broad back.

When I had somewhat recovered, I explained that it was impossible to take her along. The floodgates were loosed. He explained that she was his 'vahine' and that he loved her and could not leave her behind. My suggestion that he think it over a day or so and come back was received by him in silence. But not by the pretty satellite. She burst into a passionate tirade before which I wilted appreciably and upon which my most soothing efforts had no effect. Who was I to take away her man? Did I suppose she would let him go? Did I suppose that he would leave her, loving

her as he did, and she turned to him for affirmation, which she got. There were tears in his eyes too, and suddenly they were in each other's arms unashamed of their quite moist embrace, while I stood and felt like an unadulterated brute. She led him away and he gave me a last despairing 'What would you do?' sort of look and was gone. I never saw him again.

Teriitehau a Tihone, more commonly known as Etera, appeared upon the scene the day before I was to sail. He would cast his lot with me for as long as I wanted him. He was of uncertain age. Perhaps his estimate of forty-one years was somewhere near the correct figure but more likely not. Small for a Tahitian native - he boasts only five feet -Etera was the most singular looking individual I had ever seen and possessed a great bush of coal-black hair and a wrinkled-apple sort of face that was capable of the most extraordinary expressions imaginable. Looking more like a mixture of Gilbert Islander, Fijian, and perhaps a dash of Solomon blood, he claimed Tahitian ancestry of chiefly estate. I had mentally accepted him even before he told me the yarn of his life in the strange French of the Society Islands: black-birding or slave-running with the old pirates in the Solomons and New Hebrides, years of pearl diving, and cooking on Frisco schooners.

In reply to my query as to how long it would take him to get ready to go around the world with me, he said five minutes. Unwilling to let him out of sight for fear I would lose him, I went along and supplied forty francs to get his possessions—all of them—out of hock in a Chinese laundry. That was all. No farewells or sentiment. On five minutes' notice he was ready to leave with me for a year, or five years, or perhaps the rest of his life. And so Svaap had her new crew.

Under the lee of towering fantastic Moorea we ran out of the breeze, but once in the open we met the glorious

trade-wind once more. Next dawn revealed Huaheine, an island noted for elephantiasis. The breeze held all day and we sailed along the island at midday, feasting our eyes on its brilliant white beaches, strange configuration and gorgeous colouring, following the curve of its barrier reef until Raiatea hove in sight around the point, uncertainly outlined in the haze.

Raiatea makes a totally different impression from that of the staggering magnitude of Tahiti with its great central mass dropping in deep valleys and ridges to the sea in all directions. Here there is the irregularity of a volcanic Galapagos island — this is of course also of volcanic origin — with a surprise in store wherever the eye falls. A mountain springs up where logically no mountain should be, and in the centre of the land mass, where one might expect the greatest height to be, lies the great Faaroa Valley at the head of the deep bay of the same name, splitting the island nearly in half.

The two islands, Raiatea and Tahaa, stand on one submarine base, completely encircled by one great barrier reef that has altogether ten passes and occupies a space of about twenty-three miles north and south and ten miles east and west. Raiatea is about thirty miles in circumference and Tahaa fifteen, and both are plentifully gouged with deep-water bays that penetrate to the very heart of the islands. One could spend an indefinite time cruising here, for one can completely encircle Tahaa, and very nearly Raiatea, without ever venturing outside the great protecting reef.

We entered the barrier reef by the Teavarua pass and anchored first off the village of Uturoa. Typical of almost all the villages in the Society Islands of to-day, Uturoa was simply overrun with Chinese. They have all the stores, and practically control all trade wherever you go among the islands. Some have brought their women along but many

marry native women and produce a peculiar type in which the two sets of racial characteristics are blended.

This Chinese invasion of the South Pacific is most thorough in the Eastern groups: the Tuamotus, Marquesas, and Society Islands. They are in the other groups also, in the Cook Islands, Samoa, Fiji, and so on — but as you go westward their influence becomes less and less until it is lost entirely in the most primitive regions. They are very acute and industrious and have monopolized nearly all the trading opportunities which should logically have been in the hands of the natives, and which would have provided them with a handhold in their difficult and often disastrous adjustment to civilization.

Etera had proved a great success at sea - producing good meals under the most difficult conditions, and showing himself to be a real sailor. But it was here in Raiatea that he first displayed an entirely unexpected, quite unbelievable quality that has provided me with more amusement than even his facial contortions. The keenest observer of human nature would certainly have difficulty in finding any trace of sex appeal in my diminutive Tahitian, and yet it soon appeared that he was the world's champion seducer. Five minutes after the ship was trim and fast alongside in Raiatea, he was surrounded by a bevy of beauties enthralled by his glowing accounts of the voyage upon which he was embarked. All the time we were in port there was hardly a moment but what he had his group of feminine admirers. Being an arclent advocate of variety he distributed his favours among more fortunate females than I thought possible—somehow managing to retain the good will of all. However, this was only a shadow of what was coming in the following months and years.

To my surprise that first evening in Raiatea, I saw that there was electric lighting. Curious as to its source, I went for a stroll and found what must surely be quite unique

in power plants. It was just a tiny one-man shop. The little half-caste engineer had invented a curious apparatus that carried coco-nut husks one by one to the top of a furnace where they were allowed to accumulate until there were three kilos, whereupon the mechanism opened a trap over the roaring fire and cheerfully dumped in the husks. It was entirely automatic, and merely meant keeping the bins supplied with husks. The husks are discarded in coprc making and cost him nothing. They produce a terrifia heat, requiring only one husk per minute and a half, to run a thirty h.p. motor. The electricity thereby produced costs the consumer one franc (4c.) per day per light, so our South Sea genius is in the way of becoming rich. He also supplies the village with ice by the same mechanism.

It was nearly time for the French steamer, the first for months, and great was the excitement that prevailed. All the outlying islands were sending in their produce, and almost every hour or so a small boat would put-put busily alongside to the accompaniment of great shouting in Chinese and Tahitian, unloading pigs, struggling cattle, and much copra. None of the boats was as big as Svaap, yet they would carry several cattle, many pigs, and an assorted cargo besides the several tons of copra. And yet they don't sink. At ten o'clock that night they were still unloading, to the light of a lantern hung in the rigging, and on the totally dark wharf a boy with a cowbell ran along with the hand-trucks to warn of their approach.

It was a very blowy blustery place there in Uturoa, exposed fully to the trade-wind; and even with the protection of the barrier reef the lagoon had enough motion to make it a bit uncomfortable aboard. The next day was Saturday, the Sunday of the Seventh Day Adventists who are in power here, and the genial M. Capella, governor of the Leeward Group, complained of not being able to get them to attend to necessary work on this day. The distribution of religion

in this islands is always amazing. One island will be strong Catholic, a near-by one will be Protestant, and a third Mormon, depending usually upon which missionaries arrived first. Accustomed as we are to thinking of the Mormon religion mainly in connection with Salt Lake and vicinity, it is rather surprising to come down here and find it quite prevalent among the islands.

Of course the most interesting phase of Raiatean life is the sailing that is done there. Throughout the Pacific the Raiatea outrigger canoes are noted for their speed, and not without reason, for they are perhaps the fastest sailing craft in the world and make close to twenty miles an hour in a good trade-wind. The best ones run about thirty feet in length with a beam of perhaps one foot and a depth of three. The outrigger is fastened to the canoe at the forward end by a beam in about the same relative position as the cross-beam of an ice boat and which projects into space an equal distance from the hull on the opposite side from the outrigger. This beam takes the stays for the mast and provides a runway for the living ballast. In a stiff breeze two or three men will be required on the very end of the plank to keep the canoe from going over, and great dexterity is acquired in moving about to just the right position for the strength of the breeze. The after end of the outrigger is attached to the hull by a slender arched piece of naturally curved ironwood that gives the outrigger itself complete flexibility. The craft is controlled by an enormous steering paddle, with a blade four or five feet long by about three wide, so heavy that a man can hardly lift it. This is forced against the leeward side of the canoe at the proper point by the pressure of the water, and the steerer, with feet braced against the side of the craft, strains his whole strength and weight at the handle. The helmsman of the larger canoes must of necessity be almost Herculean in strength. I found during my first sail that the whole sensation was remarkably like that of ice-boating. The Inland Lake 'scows' do not approach the feeling of extreme speed that is produced here. Clinging to the end of one of the cross-beams, lifting three and four feet above the water most of the time in the strong trade, I could have shut my eyes and sworn — but for the balm in the air and the warm salt spray — that I was flying.

We spent days seeking out the most beautiful anchorages of Raiatea and Tahaa, sailing always within the great barrier reef, entirely by eye. One soon becomes accustomed to an entirely new sort of piloting here. The charts are for the most part of little help in sailing among the coral reefs and lagoons, and one works the ship by eye. Except with the sun ahead one can easily see all dangers, as the water is so clear that the bottom is visible quite a few fathoms down, and the changing colours of the water betray the shoals and deeps. Anchoring is in many places impossible, for fringing and barrier reefs usually slope off so abruptly as to prevent this. As a result, when on the leeward side of an island we would often do as the island boats do: run in and tie up to a coco-nut tree or put a kedge on the reef, and the wind would hold us off. Sometimes we put up a small riding sail to help head the boat off. It means, however, a great deal of caution for often there are currents setting on to the reefs, or on to shore, and once on the coral a ship is almost certainly lost.

We finally left for Bora Bora from Tiva—a charming little village of Tahaa. The natives were kindliness personified. When we left they begged us 'please no go' and then heaped upon us gifts of poi, coco-nuts, bananas, fish, and flowers. Far at sea we could still smell the delicious

vanilla scent of Tiva.

It was an easy day's run to Bora Bora, but with an uncomfortable sea all the way for there was a strong current setting between the islands against the trade swell. Early in the afternoon we sailed in the pass to Bora Bora and moored bow to the wharf and stern tailing out to an anchor—for the wind comes strong down the mountain and blows straight off the end of the wharf. We went ashore by walking the bowsprit, and thus had more privacy aboard.

The abrupt jagged peak of Bora Bora is a peculiar thing only 2380 feet high, but with almost sheer perpendicular walls it gives an impression when at sea of tremendous altitude. As one closes with the island, and makes for the fine pass to Teavanui Harbour, one is confronted by perhaps as spectacular a sight as is possible to find. The jagged double peak dominates everything. One hardly notices the gorgeous shadings the coral lends to the rambling lagoon waters or the magnificent surf on either side as you enter the pass. You are somehow aware of the sensuousness of the heavily laden air that comes to you from the land. But as the compass needle is drawn to the north, your whole attention is focused upon that remarkable peak. Everything else is subordinated. Then suddenly you realize you are in the harbour and notice the tiny village cuddling against the base of the cliffs. You search for the wharf and find it a long substantial structure of coral rocks covered with a level greensward. You are busy with anchors, mooring lines, and making things shipshape for a few moments and then you sit on the cabin house and relax, and add one to the lengthening list of ports made. Your eyes naturally flow up to the mountain again and you give a start. Like a fairy of old, able to change form upon a moment's notice, your magnificent peak has suddenly dwindled, shrunk to most mediocre proportions, and like a dumpy old woman looks much less than its actual height.

There is a different air about Bora Bora. For one thing, it is cleaner than any island in the group: natives, villages, streets and everything. But that is not all. There seems to be an air of prosperity, of pride and, above all, of friendliness

surpassing all the other islands. The smiles are so charming and spontaneous that I found it necessary to stroll along with a fixed grin on my countenance, answering the 'Iaorana' of all within sight. They called it from the front lawn where the family sat in contemplation, from the porches where the women worked at weaving hats and braiding, from back yards, and even from coco-nut trees. And every greeting was an invitation to enter and be at home. The houses were of the usual native type, bamboo and thatch, with now and then a frame house. All had flowers and vines and hedges of some sort to set them off from the road, the hedges being something unusual to the Society Islands. All the usual fruits, the breadfruit, the banana, the pawpaw, and so on, grew in rich profusion. From the head of the wharf spread a delightful village green; at the other side a large bell for school and other assemblages.

In the evening, with a new moon beaming its promise of good weather, my heart seemed filled to bursting with a soul-satisfying peace. Every spot like this, with its friendliness, its wealth of beauty, its peace and simplicity, nurtures a growing feeling of revolt toward the deceits and artificialities of civilization. Here I regretted for the first time my long stay in Tahiti. Had I known Bora Bora....

Out on the reef side of the large harbour off the village of Vaitape lies a good sized island of white beaches, coco-nut trees, and some cliffs. It is called Tupua. Somewhere in the cliffs, it was said in Vaitape, existed a natural phenomenon called 'La Cloche': a large rock of curious shape which rings like a bell when struck. There were all sorts of native legends about it. A native boy volunteered to guide me there, and we set out in his outrigger. Reaching Tupua we started along the shore, spearing fish and stopping when hot and thirsty while Metuatai, the boy, climbed a coconut tree and procured drinking nuts which we husked on

a sharpened stick driven into the ground. One never tires of the delicious nectar, cool and actually effervescent, nor of the soft rich meat of the young nut, and we always have a quantity of them aboard when cruising among the islands. Thus, we made our leisurely way around the island, the string of rainbow-coloured fish growing, until we had nearly completed the circuit. Here we left the shore and climbed. High up in a crevice we found a segment of rock shaped like a large and much thickened ploughshare projecting straight up from the base rock. It was higher than a man, and as thick, with the top flared out like an anvil. Taking a small stone I struck 'La Cloche' with it. A pure, confident reverberation rang out through the canyon and echoed back from the rock walls. It had all the clearness of a perfectly cast metal bell, and the tone of a certain bell-buoy that I had often listened for after passing Execution Rock in Long Island Sound on the way home to my mooring off the Douglaston Yacht Squadron's dock.

Going back along the shore I was amused at the glimpse of native child life which was put before me. Along the sandy beach and among the shells were cast up all sorts and sizes of little model boats that the children of Bora Bora had made and sailed and sent out to sea. We were directly across the bay from the village, in line with the trade-wind, so for years the little craft had been washing up here, and it was a veritable boneyard. But the thing that struck me as being so strange was the fact that these were not the toys I had known as a child, but instead were all outrigger canoes. The only boats the children know are the outriggers, so of course that was what their playthings were. The older boys in Vaitape played at a sport that was certainly not a South Sea monopoly: stiltwalking. The larger boys had steps at least five feet from the ground and were playing a rather strenuous game. A half dozen with stilts the same height would stalk in a group, kicking their

elongated wooden legs at other wooden legs, trying to dismount each other. It was sort of a game of King of the Castle, and went on until there was only one survivor, whereupon it started all over again. They were expert, and sometimes fought a quarter of an hour, lunging, feinting, clashing at one another, before one would fall. Off to the side the little tots with stilts no more than a foot off the ground imitated their elders very seriously.

In the evening I called for a few minutes on Ellacott, the brother of my shipyard Ellacott in Tahiti, and found him to be the owner of one of the largest coco-nut plantations in Bora Bora. He has a rather advanced case of elephantiasis. There was a boarder — one of the two Americans I had heard so much about from the natives. C— was seventy years old and doddering, and he fell upon me as if I were a prophet from heaven. The other American was the missionary, a Seventh Day Adventist, and the first American

missionary I had yet met.

Time flew. It always does in the islands. The night before we were leaving there was a big Hula. Until late in the night they danced, with only the moon and sometimes a flaring coco-nut frond torch for light, and the drums beat ceaselessly. Hours later we made our way home along the winding road among the palms, a carefree band of garlanded Youth, singing and dancing to the music of the guitars and an accordion. A last gathering on the end of the wharf by Svaap, farewell to the people of Bora Bora, and we sailed at 4.30 a.m. for Maupiti — called by many of the old islanders the most beautiful of all the atoll islands. There, we were told, we should find two Chinamen, many beautiful vahines, and only one white: Frisbie, whom I had already met in Tahiti and who had chosen this spot as the inspiration for his writing.

The night was beautiful beyond description and I ached to prolong the moment into eternity as we ghosted out of

the grand bay and found the pass in the starlight by the break in the white of the surf. It is always a thrill to sail through a pass, but doubly so at night. This, however, was an ideal pass, wide, and free from all dangers, currents, and bad seas. But the warnings I had had about the Maupiti pass flashed through my mind, and I wondered what it had in store for us. The mountain climbed skyward behind us against the purple sky and we left the breakers behind and heaved a sigh.

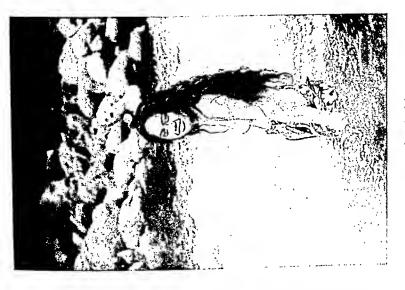
It was another short run to Maupiti, only thirty-three miles pass to pass, and we made it in short time for the wind came in strong with the sun. Few boats ever enter Maupiti pass which is very narrow and dangerous. With the breeze at all to the south of south-east it is impossible. A strong current pours out of the narrow tortuous channel all of the time and meets the incoming swell, forming

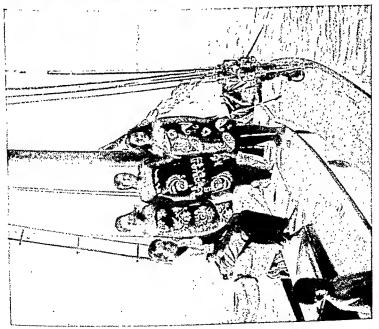
treacherous seas and boilers in the very pass itself.

Etera knew the pass, having been in twice before in the course of his ramblings. One look at it and my heart sank,

and I said it was impossible.

It was, so far as one could see from seaward, breaking straight across. Etera explained that it was the lip of the right hand reef, extending a little in front of the other side, that made it seem so. I started the engine to get more speed and with a strong wind abeam and all sail we made for the breakers, ready to throw her about at the last minute if it looked too bad. The gap appeared — it was breaking nearly across at that — and we were in the midst of quantities of foam and spume which came swirling out. A sharp jerk to the right, and we followed the jagged edge of the coral on that side at an arm's length to get the advantage of a back eddy and keep out of the worst of the current and whirlpools. The wind sang in the rigging and the sails pulled their utmost. The engine ran at its best form. And we stood still. Then with a furch forward as the back





eddy gripped us we shot in a few yards and again met our match. It was hard work at the tiller, and I sweated like a stoker as I heaved hard to starboard — then to port — to counteract the powerful surges that threw us viciously one way and then the other. Another charge forward and we were out of the worst. It was just straight current now, and no seas and whirls, and we drove against it exultantly, confidently, for we knew we were safe then.

Like all the rewards in life, that are sweeter by having had to work for them, the lagoon of Maupiti seemed the most utterly beautiful thing we had ever seen. We believed, as we had been told, that it was the most lovely of all the atolls of the Pacific. A practically round barrier reef of twenty mile circumference, a narrow band of shining little islets of white sand and palms framed by mounting white crested breakers, encircled a lovely body of placid water only eighteen feet deep in the deepest places. The varying bottom of wondrous formed coral and coral sand shaded the water through all the colours of the spectrum and surely many hues that exist nowhere but in coral coloured lagoon waters. And, thrust up from the middle of this aquatic Garden of Eden, a rough diamond in a rainbow setting, all cliffs and knife ridges and perpendicular bluffs, stood the island of Maupiti.

In a dream we sailed between the little guardian islets of the pass, Teiti Ahe and Teapaa, and heard the sighing of the palms. On into the big lagoon we sailed, winding our way through the spots where the coral sent up castles and pinnacles almost to the surface. Every detail could be seen on the bottom: every twig and filament of the tree corals; every crevice, spire and rosebud, and the flashing hordes of grotesque and lovely fish.

The little village clustered comfortably at the foot of the bluff on the eastern side, and boasted a tiny quay to which we tied, with an anchor fore and aft to keep us from touching. There were six inches of water under our keel. A large boat could not enter the lagoon, but Svaap with her draft of scant five and a half feet could just do it. Our heaving line fell short of the shore and at once a little boy threw off his pareu and dived for it, glistening in the water as he crawled out like a chocolate toy. Frisbie, dressed up as no American islanding in the South Seas ever does, stood there with the natives. He afterward explained that he had thought it was the Governor paying an official call.

The village was a disappointment. Here in this most supremely lovely spot of all lived about 200 natives, poor, rather dirty, and completely the reverse of our friends in Bora Bora. There is nothing for them to do here, no copra to speak of and a boat perhaps once a year. Originally they would have had a clean self-contained and contented community. But most of them had lived in Tahiti, Raiatea, or some of the other more civilized places and had learned a different standard, had acquired new wants and necessities, and had now fallen into a state of abjectness and forgotten their arts and customs. Although the venereal diseases which infest the more 'civilized' centres seem not to have acquired a strong foothold here as yet, there was plentiful evidence of lung trouble, and nearly every person on the island was coughing, or sniffling with colds. Kippis, in a history of the voyages of Captain Cook, refers to the early voyages to the South Seas in the following manner:

Some rays of light must have darted on their infant minds... Perhaps our late voyages may be the means appointed by Providence of spreading, in due time, the blessings of civilization among the numerous tribes of the South Pacific Ocean, and preparing them for holding an honourable rank among the nations of the earth. There cannot be a more laudable attempt than that of endeavouring to rescue millions of our fellow-creatures from that state

of humiliation in which they now exist.'

I later had opportunity to explore more primitive groups where the natives were in that state of 'humiliation', having escaped the 'blessings of civilization'. I was ashamed to make the comparison with those that civilization has reached.

Frisbie, who considers the Tahitians a decadent race (the term Tahitian applying to Society Islanders in general), said that I would find the Cook Islanders a virile, energetic race on a much higher plane. He should know, for he married one. This lone roamer of the South Seas is a lover of solitudes, waste islands, and his tale of the great Puka trees on Vostok, and the millions of fish and birds at this and other of the uninhabited Line Islands, almost intrigued me into changing my plans and including a trip there in spite of the greatly increased distance. I continually found that my appetite for exploring the Pacific was beyond the possibilities of a single cruise.

We stayed several days, and climbed the cliffs to view the atoll from the peak, where it took on an entirely different and if possible more beautiful appearance. Below — I could have dropped almost a thousand feet straight on to Frisbie's thatch roof — Svaap was a speck at the end of a miniature dock. I saw the turmoil of waters in the pass and was warned not to stay too long and tempt fate, for the breeze had been several days in the east and should it go to the south a few points I would be trapped for the duration of the southerly which might be a week or more. Going down we raised a flock of wild fowl. I believe I have not mentioned the flying chickens of the South Seas. They fly like partridges, forage for their food in the hills and valleys, and roost high in the trees at night. It takes patience and a very good shot to bring one down. Even the tame ones in the villages seek the tree-tops at dusk.

Etera continued to provide plenty of amusement. I was becoming convinced that he had relatives and friends on

every island in the Pacific. His name was called from the crowds that greeted us at every island. They all brought him gifts of food and discussed the trip with him by the hour. His friend the pastor here, who was from Tahiti, brought us a chicken and two eggs. The chicken afterward laid another egg under exceptionally difficult conditions at sea en route to Mopelia.

Etera's crowning achievement at Maupiti the night before we left, was a personally conducted beauty contest of all the village beauties for my benefit. It was rather startling, for after the eliminations were over and the final judgment about to be awarded, I found that I was to be the prize. The problem was fortunately or otherwise solved by the arrival of the apologetic village mutoi, or native policeman, saying that after ten o'clock-and it was that timeall the lights should be out and everyone in bed as it was Sunday evening. This, have the missionaries accomplished in the far reaches of the Pacific! Etera took the three finalists home, and presumably concluded the contest himself for he only returned in time to sail the next morning.

After repeated farewells to the entire village we slipped away from the little dock, and wove our way out of the labyrinth of the lagoon to shoot the pass somewhat after the manner of a roller coaster, but aided by the knowledge gained in entering. We were now off for Mopelia, Count von Luckner's island paradise where he lost the famous war raider Seeadler on the treacherous reef.

CHAPTER VIII

Mopelia had her war romance fifteen years ago. Most of us know the story of Germany's buccaneering raider, Count Felix von Luckner, who roved the seas in the Seeadler, an old squarerigger converted into a camouflaged floating arsenal, preying upon Allied shipping. Unless we have read his book we may not know how the beautiful ship found her last port down there on the reefs of Mopelia.

Only the other night at dinner, Count Luckner told me how they had sought this isolated tropic isle after months at sea, in search of fresh food and water. Anchored there off the lee reef, while most of the large crew and the prisoners from the scuppered American ships were recuperating ashore, the Seeadler had been thrown upon the

reef by a tidal wave and destroyed.

Count Luckner and a chosen five sailed a small boat to the Cook Islands and Fiji, seeking a schooner in which to resume raiding. Lieutenant Kling and the other Germans had the fortune to capture and escape in the Lutece when this French schooner made her semi-annual visit to the island.

That was in 1917.

Now, twelve years later, Svaap came to Mopelia. Etera, I was surprised to learn, had been cook on the Lutece when she came to Mopelia. He was bursting with excitement at this revisitation of the scene of his adventures, and related again and again the details of being captured by the Germans and of the fury of Monsieur M-, head of the Company, who had unfortunately made the trip with the Lutece. Etera alone, out of all the captives, was kept on board for twelve hours to cook for the Germans and to sail the ship off and on while the stores and equipment were being transferred from shore. Then he spent an eventful month marooned on the island until Captain Winchester arrived in search of the missing Lutece with the Tiare Taporo. The little schooner picked up the crew of the Lutece and the American prisoners who had been left on the island by the Germans, and sailed back to Tahiti. Etera was very much pleased with the Germans.

'They could have killed us all,' he said. 'Mais non, they were fine to us, and in a few minutes I was no longer

afraid.'

He must have been quite the hero among his shipmates after he returned from his twelve-hour vigil aboard the captured ship, and no doubt regaled the others with a gorgeously embroidered tale of his doings.

We found the Seeadler there—just a heap of rusty tanks and machinery now—marking the point of the reef on the right-hand side of the pass. The current surged and frothed its way far out into the sea. Mopelia is a typical atoll—a circular ring of coral and little 'motus', as the small islets are called, enclosing a lagoon ten miles long. For nearly the whole year round the SE. trades throw a heavy surf upon the windward side. As the reef is low much water breaks completely over it and into the lagoon. There is only one break in the reef—a small winding pass on the NW. side. Therefore all the water that washes over the reefs into the lagoon has to escape by this one narrow channel.

In many of the atolls, with wide and numerous passes, tidal action may overcome this overflow current, but in the case of Mopelia and Maupiti, and many more, the outgoing rush of water never ceases, and sometimes runs as fast as eight or ten knots although from four to six would be more usual.

The trade-wind blew straight out of Mopelia pass, so

only power would get us in. We tried it, doing six knots through the water. We gained inch by inch, creeping almost imperceptibly between the sharp jutting ledges of coral. Half-way in, the channel shoaled and the current boiled still faster under us. Our forward motion ceased. We tried for back-eddies so close to both edges that we could have jumped on the reef. The waters, seeming to resent this invasion, gathered power and slowly we lost ground. There was no room to turn.

It is a great game this. No place for a man with too many nerves or one who won't take a chance once in a while. We had taken one here - the longest one - and it seemed we had lost. But there was a possible way out: retard the motor just a trifle, keep bucking the stream at four or five knots to retain control, actually going astern slowly with the current which was now doing better than six. Slowly we retreated in this manner, and after what seemed hours our stern poked its way out into free water and we breathed again.

We decided to wait one day for a possible abatement in the current, and executed a manœuvre that surprises me

when I think of it now.

The wreck of the Sea Devil's ship lies upon the point of the reef just outside the entrance to the pass. Nothing remains but the engines and tanks. They are on the very edge of the reef, and there is deep water beyond. So we nosed up and threw an anchor on the old mass of rusty metal that once pushed the plundering raider through the seas. The trade-wind and the current kept us tailing out from the wreck and there we spent the night. I got out the story of the Sea Devil and read how the castaways lived on their earthly paradise that now tempted us, and how they ultimately escaped from the island.
Suddenly out of the dark that night came voices. After

an extended long-distance conversation in Tahitian with

Etera, three natives who had been sent by the 'patron' of the island to investigate Svaap came alongside in an outrigger canoe. We fed them and they stayed all night, greatly to the discomfiture of those ashore as we found out the next day.

The story as we eventually got it was amusing. Someone had spied our arrival and strange manœuvres from the main island several miles away on the other side of the lagoon.

'It is the Germans again,' they had cried. 'There must be another war.' Whereupon they all took to the bush. The last strange ship to come to the island had been the Seeadler—with the well-remembered results.

With the coming of night, Beaulieu the 'patron' had sent the three men over the reef to scout around and investigate the ship. Naturally, when they did not return, the fears of those on shore were doubled and all spent a sleepless night. One of the three was unfortunately the cook so there were no meals until the next night.

When dawn came Beaulieu ventured across the lagoon to the reef where he found the dreaded 'German Raider' to be a mere 32-foot American yacht, with his three absent-minded scouts safely on board indulging in a warm breakfast.

By eight o'clock he had a gang of sixteen natives at the pass waiting to help us get in. The first attempt failed. Then with the engine running well we tried again. At last by means of tow-lines ashore, anchors carried ahead by outriggers, expert knowledge of eddies, and a little luck in the wind easing up, we crept past first one rusty tank of the Seeadler, then another, then a tree, a rock, and in forty-five minutes of running full speed ahead we made the few hundred yards of narrowest pass and emerged into the glittering lagoon, miles of which now spread before us, all at our beck and call.

With the 'patron' aboard and his men in tow in canoes, we sailed over to the main island and anchored in eight feet of crystal water over beautiful white coral sand. The lagoon of Mopelia was so large we could not see the reef on the opposite side, and could only gauge its approximate curve by the line of an occasional motu.

There are five major islands, four of these small, but the main one itself curved along the windward side of the atoll for a distance of ten miles—low and with hardly anything more than the coco-nut palms in the way of vegetation. Our cargo of bananas from Maupiti and the fish we had caught while trolling outside, were accepted with ill-concealed delight as reward for the assistance given us in entering. They have no fruit here at all, and rarely catch the deep water fish.

Once in the lagoon we stayed many days and I participated in their work, their excursions to the motus for fish and birds' eggs and turtles, and in their recreation.

There were twenty-six humans on Mopelia — all employed by the French concern in Papeete that owns the island. The Frenchman Beaulieu was the only white, and had his native woman and their beautiful little three-year-old daughter Aimée. Of the twenty workers three had brought their women with them, and lived aside from the others in little individual huts. All, with the exception of Beaulieu, were natives of Tahiti and had come to the island on a year's contract. They are free to return home after the time is up, but quite a few had been several years on the lonely atoll, renewing their contract from year to year. Beaulieu had just arrived to take charge a month before on the semi-annual supply boat.

The men breakfast at seven and work straight through to three when the second meal is served. With them I learned a new method of copra gathering, for here the nuts were rafted and floated to the base camp like logs in the north country. In the early morning we would go to the farthest end of the island in canoes, and the fallen coconuts would be carried to the lagoon to form the beginning of the raft. Gradually we would work along the shore toward camp, towing the raft and enlarging it with nuts collected on the way. Once home, they were landed, and later opened. When removed and dried, the meat of the nut becomes copra and is stored until the arrival of the semi-annual schooner.

Certain of the men were detailed to go after fish — which provided the most important food supply. Some days I went with them to fish the reef crevices of the windward side of the main island and caught dozens of rainbow-hued fish from rushing millraces in the labyrinth of caves and channels of the coral. The sun was setting when we fished in this way and everything seemed unreal. We went home and cooked the fish over the standard South Sea stove — a five-gallon tin with the top out and a hole cut in the side to put in the wood. Eating under the moonlit palms our simple meal of fish with coco-nut sauce, and the tender meat of the nut itself for dessert, we were as content as lords.

But the best of all was the night fishing on the motus. At dark we set out in the big sailing outrigger, with a strong trade-wind to drive us a-flying over the vast lagoon. I would stand on the gunwale by the mast — wind-blown and spray-swept, and watch the great globs of radiant phosphorescence go tumbling in our wake, and the tropical moon play hide-and-seek behind racing trade clouds. When we landed on the white sand of the island you'd have sworn it to be snow — so white and sparkling it was. There were turtle tracks at once, and the smell of thousands of birds, and their tumult. The motu was the biggest of the rookeries, and the birds were myriad.

We found our way out on the reef, with wind and surf tearing at us.

My equipment was a short, freshly cut rod, line, a small plaited leaf basket full of the soft tails of hermit crabs for bait, and three coco-nuts. The latter were for food and drink should I require them.

We fished the surging crevices and channels in the coral, using a very short line so that it would not tangle. It was virgin fishing. They came one after the other, sparkling all colours in the moonlight. Some were grotesque beyond

imagination.

I would drop my hook with its delicious morsel of crab into a deep channel. The surge would grab it and rush it out toward the open sea the length of the line. The next wave would shoot it half-way in again before a flash of phosphorescence from a black cavern in the coral would engulf it. Then I would heave and the fish would join the others in a big cool coco-nut-frond basket.

Now and then a small shark would come a-hunting, and if I did not see him first and get my bait out of his way in

time, it would be lost, along with rod and line.

Back to the island after midnight - circling it for turtle and to rouse the birds once more just to watch the fun. Then the canoe is launched and off we go. A giant turtle, five feet across, hits the outrigger in his frantic haste to escape. He is gone before we can more than shout.

And so once again we fly over the waves, sometimes through them, on the wings of the moonlit trade. We can see bottom and fish in several fathoms. The island becomes

just a strip of snow, the palms a silver blur. . . .

One day we put to sea again. The three natives who had comprised the investigation committee the night of our arrival took us through the pass. We were borne on the crest of the millrace. The rocks and jagged ledges on either side shot past at a terrifying rate, and it was but a matter of seconds before it was over. The natives got their respective rewards, and leaped into their outrigger to chase an unfortunate pair of turtles trysting there on the high seas.

For us it was the beginning of a difficult but eventful voyage to Rarotonga, capital of the Cook Islands. These islands lie scattered over a wide area with hardly any harbours or contact with each other. Most of them were discovered by Captain Cook on his second voyage to the South Seas, and although the native population has decreased tremendously since the advent of Christianity, the people have retained a great deal of their charm and proved to be the most unspoiled of all the natives we had yet found. Nowhere else in the South Pacific did I find such unlimited spontaneous hospitality as that which was offered by the Maoris on some of the isolated Cook Islands.

We cruised the group thoroughly, but met with a spell of unsettled or bad weather which prevented us from landing at several islands. Overcast skies made observations impossible, so we often had a hard time finding the little specks of land and spent long nights of worry — uncertain of our position, fearing to come unexpectedly upon a reef.

We discovered Atiu by the exotic fragrance of its orange blossoms which came to us far at sea. There I had quite an adventure in landing. There was no barrier reef — only a fringing reef that bordered the island itself. Upon it broke a heavy surf. There was no anchorage.

We put over the canoe. Etera sailed Svaap off and on while I paddled in to have a look. The swell was so large that when in the trough with my tiny dugout I could see only solid walls of water about me. The whole population lined the cliffs and on the very top was a white man who signalled that it was possible to land. Naked natives stood on the rockbound shore in a little gorge that broke the abrupt face of the cliffs. On the reef were half a dozen men, their muscular brown bodies glistening with the surf,

covered one minute and high and dry the next. This was where I was to land.

The swells piled up higher. I waited just outside where they broke for the signal to come. Then I dug the paddle into the sea for all I was worth. The canoe jumped ahead. Then I noticed the men on the reef motioning me to go back, shouting unintelligible words at me. Frantically I backed. The motioning kept on and I continued backing. I tried again but soon all were motioning me away again,

although the man in white on top of the cliff was waving madly to come on. It suddenly dawned that the native signal for come on is the same as our motion that means

go away.

There was a moment of confusion. I am rather uncertain yet just what I did, but somehow the backwash of a breaker left me on the very edge of the reef where I tumbled out to help the natives hold the canoe high in the air so the next wave would not crush it. Before the third wave came we had carried it back away from the strength of the surf and soon were climbing with it straight up the gorge to a little shelf about forty feet above the sea.

It was my first landing on a reef in much of a sea, and I felt quite proud. Even the natives looked complimentary. They do this sort of thing every day of their lives and think nothing of it, but they do not often see a white man do it.

They did not know how weak my knees were.

The island of Atiu was a complete surprise to me. From the information available I had expected to find something like Mopelia, but higher, with merely a small gang of copra

workers.

I found a rather mountainous island, of twenty-four miles circumference, tapering down to the sea in many valleys. But more than the size of the island, I was surprised at the things I found there. I found a road - that came as near to the landing place as a road might come - to the top of the gorge. And down out of the hills bounced a couple of Ford

trucks, loaded with cases of oranges.

I found nearly a thousand people, a resident agent, a radio station, two trading companies that shipped oranges to New Zealand five months of the year by a small vessel that lay off and loaded over the reef with outriggers and boats. In the trading store I found a stock of the usual things one is apt to find in the Pacific Islands: cheap perfumes, tinned beef, tobacco, parasols, silk underwear, and pareus.

Harry Scott, trader for Donald Company, brother of the Resident Agent—as the Government representative is called—took me under his wing and we went to the top of the island, where lies the village, in an ancient groaning Chevrolet with Ford wheels, Ford radiator, and other

assorted parts.

We explored the various spurs of the several miles of road, where the oranges from the different valleys were collected to await transportation down to the sheds of the lower level. We looked at the caves and the crater lake, and the ancient relics of cannibalism.

When Captain Cook discovered the island on his third voyage, calling it Wateeoo, he found a fierce, conquering, physically splendid race, without fear. Landing must have been difficult in Cook's time also, for Cook himself never did get ashore, although one of the officers, Mr. Gore, with the Tahitian interpreter and two others, managed to land and spent the day ashore as I did. Native tradition has it that Captain Cook feared to land because of the warlike disposition of the natives, but as this is not in accord with his usual fearless attitude I imagine there were other reasons, probably the difficulty of landing.

What a change in a hundred years! Tame natives. Fords. Radio. Fruit steamer. Silk underwear! But it was bound to

come.

Thus I took a concentrated lesson in the activities of

Atiu, condensed into one day, with numerous nervous glances at the weather. It would have been disastrous to have Svaap blown out to sea with only Etera aboard.

Loaded with oranges, mangoes, and good wishes, the canoe was finally launched through the surf and soon we were

waving farewell to the crowd ashore.

Head winds persisted. We beat toward Rarotonga doggedly, gradually getting farther south—nearly 1300 miles below the Equator—and each day it was colder. I slept under blankets. During the long six-hour night watch I bundled up in all the clothes I could muster. We ran out of water, the first time in the whole voyage, and drank orange juice. Then our firewood gave out so we had to cook on the little Primus entirely.

At last a tiny pyramid of grey stood against the horizon thirty miles to the south. Soon Rarotonga stood outlined against the sunrise colours. It was like the island of a pirate king. I almost looked for a vessel bearing the skull and

crossbones to be lurking behind one of the points.

We made it the next day against a half gale. It was our

farthest south for the entire voyage.

The Cook Islands, of which Rarotonga is the capital, and also the islands of British Samoa, are governed by New Zealand. This country has made the worst possible mess of governing its islands. The policy of restricting native activities and of sending second-rate men to administer the government has resulted in an unfortunate state of affairs. The natives are unsettled and restless, without faith in their white rulers.

Several native chiefs, men with racial pride and dignity,

voiced the same questions when I visited them.

'Why,' they asked, 'did the high chief, who never visited the islands, insult them by sending men of a class fit to be their servants, to rule over them?'

This is expressive of the mistaken policy which is so

often followed by nations in governing their less advanced colonies. It is especially disastrous in dealing with a race of the intelligence of the Maoris who inhabit these islands.

The Maoris were perhaps the finest of all the Polynesians, a people with a great deal of racial pride. Under the guidance of intelligent men, men of sympathy and understanding and tolerance, with a sincere interest in the welfare of their brown subjects, these Maoris would have undergone their inevitable readjustment in a spirit of co-operation,

giving of their best.

Instead of that they are given men of little or no accomplishment, without vision — petty politicians who could not make good at home. These men, commanding little respect in the beginning, lose even that through the example they set in their private lives, their intrigues, greediness and utter lack of understanding. Developing in the native a feeling of repression and dissatisfaction, they are soon confronted by problems with which their feeble abilities are unable to cope. Then we have affairs such as the entirely unwarranted massacre of natives in Apia when I was in that group a month later. Without any real provocation the beloved and aged chief of Western Samoa and several of his followers were shot down by the police while walking unarmed through the streets.

Affairs of this nature are hushed up, and the facts that are given out to the world are veiled, as I saw from clippings which were said to

which were sent to me at the time.

That our administration of American Samoa has been wiser is seen at once. Nothing of this sort has arisen there, and it is held up as a desirable example by the natives of the Cook Islands and Western Samoa.

That natives should have a right to an opinion, or a voice in the destiny of their own islands, is probably a novelty to many. Nevertheless, these are not African savages, or Australian aborigines, but they are a race of an entirely different breed. They are intelligent. They have for hundreds of years had a fairly advanced form of society, independent and virile. That they respond to wise administration may be seen wherever the commissioner of an island is a capable man.

It was especially interesting to me to study Polynesian history while in Rarotonga - for it was from here that the Maoris set out on their great migration to New Zealand. The average person has perhaps heard vaguely of the Polynesians as the 'seamen of the Pacific', but I wonder how many realize the extent of their voyaging, the ability of their canoes, and the range of their knowledge.

These Polynesian conquerors, although it is still debatable whence they came, roamed the 7000 miles of ocean from the Carolines to Easter Island when Europeans had not ventured beyond coasting voyages in the Mediterranean. They have been called also the 'Phænicians of the Pacific', but unlike the restricted Phænicians, they explored the widest waterways in the world. They spread so far toward Antarctic regions that their legends recount tales of icebergs and polar animals.

When navigation in Europe was in its infancy the Polynesians had rude charts showing the archipelagos of the South Pacific, the currents (which they detected by stone sea-anchors), distances between groups, and bearings. They knew how to read the stars. Their canoes were capable of extended voyages, carrying more than a hundred men. They were of either double canoe or outrigger type - seaworthy and well built. These canoes were from a hundred to a hundred and twenty feet and more in length, capable of carrying several tons of goods besides the hundred men. They were, of course, not dugouts, but were planked and fastened by sinnet cord and made tight with pitch. There is a canoe such as this preserved in Auckland to-day.

Perhaps we will stop and wonder when we learn that 129

the hardy Polynesians, with a knowledge of navigation and canoes such as these, opened up and explored and conquered every far corner of some twenty-five million square miles of Pacific waterways.

Time rushed by. The mail boats came and went after filling their holds with fruit and copra which was towed out to them on lighters by a panting little tug. Having sent and received our mail we too took on the badge of mail-service and were ready to leave. For we were to carry His Majesty's Mail among the islands.

We were loaded with fruit and fresh things, and had on board two passengers, natives who wanted to work a passage to Aitutaki where they belonged. The postmaster himself came aboard to deliver to us four huge mail sacks. Then we got under way, while a crowd stood on the little Avatiu

wharf which trembled and groaned threateningly.

We were no sooner clear of the island than storm clouds began to appear. Soon the trade-wind increased to half a gale and the seas piled up. For the first time in my life I was really seasick, but only for a moment or so. It was, I believe, an after effect of having eaten poisonous candle-nuts

in Rarotonga.

One of our passengers was a half-caste who certainly forgot his Polynesian ancestry. The weather was just what Svaap loves—a real snorter just forward of the beam. Reefed way down she tore along, deck under, and the seas broke harmlessly on her sweetly rounded bilge. The island boats cannot be driven in this manner for they are not heavily ballasted, deep draft boats like Svaap. They would capsize if you drove them like that.

Poor Tutere, the half-caste, never having been on a craft like Svaap, concluded that I was stark mad — seeking death. He flung himself in fear and trembling upon the cabin floor and remained there until we reached the shelter of

Aitutaki two days later, whereupon he rushed ashore with solemn vows that never again so long as he lived would he put his foot upon a boat.

There was no safe outside anchorage here, and although there is a pass, the lagoon is too shallow to enter. So we moored her with the help of jovial Captain Vellenoweth, Resident of the island, in the middle of the rushing channel itself.

Soon, in the middle of a network of cables, chains, and hawsers, Svaap looked like a fly in a spider's web.

It became the scene of many disasters. The current shot past as high as ten knots at ebb tide, and never less than four, even at slack water. Natives coming to inspect the ship in small outrigger canoes would get caught in the millrace alongside, be sucked under and capsized. Then they would go shooting out to sea and have to come in over the reef. Several canoes were wrecked. One small boy was marooned on a rock until his father came and rescued him at slack water. Etera got a ducking trying to get ashore at the wrong time. He was very elaborately arrayed to impress the women of Aitutaki, and was much chagrined. After that he remained aboard and held court. Within an hour his Billiken face was wreathed in smiles as the first of his never failing admirers arrived at risk of life and limb to pay him homage. Seeing that he was not going to be lonesome aboard, I moved ashore to stay at the Residency.

Aitutaki hospitality has no equal. The kindest gesture I have ever received awaited me on my first landing. There, on the little pier, guarded by five small native boys, were five piles of coco-nuts and fruit: a welcoming gift from each of the five villages on the island. And there was a welcoming committee of head men there to be introduced and to offer greetings.

My reception was significant of my whole stay in Aitutaki. The whole island was at my beck and call. I had merely to express a desire to see the old stone gods, or the ancient 'marae', and there would be a hundred guides. If I wished to try the sailing canoes I would think out loud and the best canoe and the best helmsman would await my pleasure. Fishing of all sorts, dancing, singing, legends, native arts—everything the island had to offer—flowed by smoothly and joyously like a well-directed movie.

The sailing canoes are especially interesting. They are of a different type than the big Raiatea ones, smaller — about twenty-five feet long — and they always sail with the outrigger to windward. The art is to sail them hard enough to keep the outrigger completely out of water all the time. When you turn you do not come about as with any ordinary boat, but you do something to the sail and reverse ends. The bow becomes the stern and vice versa. From actual timing by a watch over a known distance these canoes sailed faster than twenty miles an hour in a stiff trade-wind.

faster than twenty miles an hour in a stiff trade-wind.

We went one day to bring the monthly supplies to the solitary leper on the isolation island. His was a delightful little isle, next to a picturesque volcanic one, surrounded by the shimmering lagoon and protected on the windward side by the reef motus and to the north by the long curbing green arc of Aitutaki itself.

As we grounded on his beach the leper came slowly, wearily, along the beach to where we were, and waded alongside for the nurse to look at. He was not in an advanced stage, but was not doing well. The spots on stomach and back were growing, and he complained of not feeling well. His things were left piled on the pretty little beach as we went on to another motu to picnic. Tragedy and joy go hand in hand in these isles, as everywhere else.

Our crew on this little expedition was Nako the prisoner, and one other capital and contracted in little. It makes one

Our crew on this little expedition was Nako the prisoner, and one other genial and contented jailbird. It makes one laugh. The difference between a prisoner and anyone else in a Government job is that the prisoner does not have to work

on Saturday and the others do. This is done to enable him to obtain his food on this day, as it is not supplied. He is not by any chance detained, for at night he is free to go home to his family, to pursue his wooings, or what not. He merely works, to a certain extent, without pay. On our picnic, Nako the prisoner carried us ashore, supplied us with mouth-organ music and other entertainment, and acted as assistant pilot and was generally useful and pleasant to have about the place.

The best kind of fishing in Aitutaki is that which is done at night for the flying fish. I sailed out to sea with some natives one night to do this. We had flaring torches and long-handled butterfly nets, and netted the fish with lightning jabs as they darted out of the water, attracted by the torch. There was also the underwater spearing, the diving into gloomy subterranean caves and catching the fish in the bare hands, and so on endlessly. These native fishermen seem part fish themselves.

But all things must end. One day we loosed ourselves from our network of cables and slid out to sea. There was a great send-off by the most hospitable people in all the world. As many as possible crowded on board for a last visit, sailing out a half-mile or so with us and returning in the long-boat. Last to leave were Captain Vellenoweth and Drury Low, princes of the Pacific, quite sentimental about the parting. Perhaps the last of my good rum from Tahiti was partly responsible, but not entirely. The ship was loaded, the water-line completely out of sight. Every available inch was full of vegetables and fruit, even our berths.

was full of vegetables and fruit, even our berths.

We were off to Palmerston, that laboratory experiment island, where one can see the results of miscegenation, between an Englishman and his three Polynesian wives, allowed to develop for several generations in complete isolation on an island far separated from any other and rarely visited.

It was a run of 225 miles, and took three days. The weather was baffling, with light following airs and squalls, and the leak which had been hothering us increased considerably. We lived like kings on our overwhelming stock of fresh things from Aitutaki.

Then one day when the sky was azure over a deep blue sea, a line of surf appeared ahead of us, and a fringe of land. We shook off the sea and slid into the quiet water behind the reef, and went sizzling along to the island

village of Palmerston.

A small boat loaded to the gunwales with one of the most picturesque crowds I've ever seen awaited our arrival. In the stern, emanating command and compassion over his people, stood William Masters, his massive old figure with its prophet-like beard making recognition easy. He is the aged son of the original Masters, who left England in the California gold rush of '49. Later he came to Penryn on a guano ship, thence to Manuae and somehow got to uninhabited Palmerston with his small harem and started to plant and populate the island as well as he could. He died in 1889, leaving behind him a most interesting and complex family which provides an unusual example of heredity and evolution. They speak a peculiar English that exists nowhere else to-day — the English of a hundred years ago—uniquely enunciated and phrased through generations of complete isolation.

Masters and his three heutenants came aboard and showed us to Ralph Stock's old anchorage — for we had now crossed the trail of another Dream Ship. Then everyone came aboard and received Aitutaki bananas. It was probably the first fruit for the people of Palmerston for years. For many of the younger generation it was the first in their meagre lives, for they have nothing but fish and coconuts, and not many of the latter since the great hurricane of 1926 when Palmerston was completely destroyed and the people

clung to the palms on the highest knoll to save their lives. Even then the seas nearly got them, for they were so tremendous that they went completely over the land.

We delivered the first mail in a year. There was great acclaim and tumult as it was distributed. Families received news of sons and daughters who had gone away. The babble of voices rose higher and higher, as choice bits of news were shouted from house to house.

Suddenly a hush fell as a strange pæan of sorrow rang out, full of anguish. The crying continued the rest of the day according to the customary mourning practice.

'Who's that crying?' demanded old William Masters.

'Who's that crying?' demanded old william wasters.

His daughter brought word that one of his grandsons had died in Penryn many months before. The letter had travelled to Tahiti with the Tiare Taporo, Captain Viggo's trim trading schooner, thence to Rarotonga by mailboat, and by Svaap eventually to Palmerston.

The island was certainly ruined by the hurricane. Several years have passed now, and it is still the nucleus for almost all conversation. It was the cause of their poverty. Before,

they could live well, and afford a few luxuries. They had copra to trade then, and schooners visited the island. Now there is no copra and no schooners come. Thus they have nothing from the outside world. Fish are plentiful, so that two hours along the reef will supply a family. When the coco-nuts are counted, those necessary for eating leave none for copra.

If one goes to Palmerston expecting to find deterioration of the species due to close intermarriage one is going to be disappointed. Physically they are better off, I think, than the majority of islanders. Mentally they seem keen. They read and write, and have a little school for their children who take kindly to teaching. Their clothing is a curious compromise between the European and the Polynesian. The younger generation grows up and many go away to

other islands where there is more opportunity. They have from time to time brought in fresh blood. But there has remained a colony of a hundred souls, interwoven in a big family of three main branches that boasts some of the most complicated relationships imaginable.

I found old Masters himself, having married several times, in the astonishing situation of having a very young wife, a daughter considerably older than the wife, and a

grand-daughter older than either wife or daughter.

We left after a stay of a few days, but I had time to learn many things about the people of Palmerston and to like them immensely. So pathetically poor that they had hardly the barest necessities of life, each family found something to give me as a parting gift: a mat woven of pandanus, a straw hat of the same material, a carving, a whale tooth, a basket of shells, a few flowers that someone cherished, and a dozen coco-nuts that I nearly shed tears over for I knew how few they had — but I knew that it would hurt them still more if I refused them. It is often in the most unexpected places that one finds hearts of pure gold.

They saw us off at dusk, and sang a farewell song, the soft notes of which followed us as we crept silently out into the

dark.

Thus we left behind us what is probably the 'San Pablo' of Magellan, the first island to be discovered in the South Seas, and one of the least known.

A squall sprang up. We were off for Samoa and American territory. Only the flicker of two or three fires astern betrayed the presence of a tiny lonesome world lost in a lonely ocean.

We had been several days at sea. I think the gods that control the destinies of sailors were trying to make up for previous hardships. A gentle trade-wind caressed our sails as we slipped mile after mile over a lazy ocean. Days were blue, intensely blue, with white fleeting clouds. But the nights were sublime, unforgettable, with a crescent moon and weird flickering phosphorescent lights on the horizon. One night, with a soft thud, Svaap touched some great fish—a sleeping whale perhaps. I always took the second of our two six-hour night watches, from 1 a.m. to 7 a.m. Almost with regret I would watch the dawn of day.

Then came the night before landfall. We were both on deck at 1 a.m. changing watches. Just then a gorgeous meteor floated out of the sky in a stream of green brilliance, so slowly that it might have been attached to a parachute. Etera gasped, mumbling to himself in Tahitian.

'That means a hurricane comes in one month to destroy many islands,' he said in a hushed voice filled with foreboding.

I tried to persuade him that there could be no connection between a meteor and a hurricane, but he insisted that it would be as he said. Next month he reminded me of this meteor while we were clinging desperately to the edge of a tiny motu in a big reef-bay of Tongatabu, with three anchors straining to hold us against the storm that spread death and destruction in the Fijis and Tonga.

With the usual contrariness of weather, the snorting easterly that we had been expecting came in shortly after I went on watch that morning, just when we wanted more tranquil seas for landfall.

We drove through the night, eyes and ears straining for

E*

warning of land, when suddenly there it was: a black lump ahead, a white line of surf.

We hove to and waited for daylight. Soon the curtain of dawn rose, and the speck of uninhabited American soil took on definite shape—just a tiny bump of an island two hundred yards across and only eleven feet above sea level, all bulging with trees as if they were trying to push each other off the yellow beach into the sea. Over it hovered a black halo of thousands of sea birds.

The atoll rim, the reef, was a wide-flung thing, enclosing a lagoon two miles across. We skirted it, following around to the leeward side to look at the pass. It was a peculiar reef, very wide and backed with an unbroken barrier of black lumps sitting on the top of the slate red of the reef itself. The pass was deep enough to enter, and wide, but I saw that a tremendous current piled out of it so that we could not enter.

My heart was set on landing on this mysterious island of ours, for the novelty of it partially, but more with a certain unsuspected romantic desire to set foot on American soil under these strange conditions.

So we skirted the reef to the most protected place near the little island and launched the canoe. Foreseeing the possibility of an upset I put my camera, knife, and some food in a press-lid tin, and started off leaving Etera to sail Svaap off and on.

I waited a calm moment and paddled hard for the reef—but an unexpected breaker came along, grew higher and higher until I thought the canoe would do a cartwheel. That sea took me absolutely clear of the reef—completely over it so that I never touched—and deposited me in the spent water running off into the lagoon, fully a hundred feet away. A heavy paddle against the wind across the lagoon followed. Many birds knocked my hat off trying to frighten off the intruder. It was hard work, but I did not

care, for I would soon be on American territory again. It was a supreme moment.

The canoe grated on a steep beach of broken shell. I leaped out like a young and solitary Captain Cook. I mounted the little bank. Before me stood a grey, solid-looking monument with a bold inscription:

ROSE ISLAND
AMERICAN SAMOA
TRESPASSING PROHIBITED
WARREN J. TERHUNE

JAN. 10, 1920

GOVERNOR

I walked around to the other side of the monument and there it was again, this time on a bronze tablet: TRESPASSING PROHIBITED.

I collapsed on the sand and laughed until it hurt. I had sailed miles out of the way to risk my life getting ashore on this isolated atoll, just to walk once more on American soil. And I found trespassing prohibited!

It must be a monument to someone's vanity, or to American System. Certainly no one is likely to come along and claim Rose Island for himself when it has been charted since 1819 and recognized since 1904 as American territory. And no one could want the tiny motu, for it is too small to do anything with, and has no water. There are exactly seven coco-nut trees. I counted them. In fact, I brazenly climbed one to get drinking nuts, and looked guiltily around. But no one had seen my lawless act—only a sleepy booby perched on the very monument itself.

I circled the island in a few minutes and explored the dense growth of Pisonia Grandes trees, sheltering under one of them from a heavy shower. There was an intense loneliness about the place, almost personified. I had a feeling that I was being followed and continually looked behind me.

A storm was coming up, so I hurriedly launched the canoe and crossed the lagoon to the pass, where I shot out with the current. The storm swept closer. I had about a half mile to paddle to Svaap, with a large shark alongside.

It was a close shave. We just got the canoe on deck and all snugged down when it hit us like a small tornado and sent us flying on our way to the Manua Group of American Samoa.

It was only a day's run to Tau, the first of the Manua Group, but the weather turned against us and we made heavy going of it with a high sea and a nasty cold dripping wind. Sunset that night was a fearful spectacle. Sundogs threatened, and a stormy-looking sky with every imaginable type of cloud all mixed up helter skelter made us a bit uneasy. At midnight it was blowing very hard. We were running nearly on our course. Tau was somewhere on our port bow, hidden in the black.

All night it rained and blew and we carried on, striving to tear aside the curtain with our eyes to discern the 3000-foot bluffs of the island. It was nearly time for dawn when a dim black wall loomed up close by, resolving itself slowly out of the murk and later advertising by its profile the fact that it was Tau.

We seemed almost invariably to make our landfalls at night, although the hours of daylight in the tropics much outnumber those of darkness.

With daylight we skirted Tau, heading for the chief village which lies on the north-west side. Ofu and Olosenga, the other islands of the group, were now also in sight, shrouded in rain. All these islands are towering in appearance, but have rounded and verdure-clothed slopes in contrast to Tahiti's sharp and jagged peaks. The bluffs drop steeply into the sea making roads impossible and anchorages scarce. Nasty squalls broke out of the north-west from time to time, so that we dared not anchor in any case. Instead,

we hove to a half-mile off Tau village. I did want to go ashore.

A bonito canoe, well made and ornamented with shells, came out to us with three natives who were tattooed a solid blue-black about the hips and legs. They moved liked the wind with lightning-like flicks of the paddles. One of them spoke in broken English.

'Where you come?' he asked, looking all over the ship in amazement, and particularly at Etera who had not understood his first query in the Samoan tongue. He wondered what manner of man this was who looked like a Samoan

but did not speak the language.

I told him that we had come all the way from America. 'Oh! Tau America too,' he said, and then wanted to know. 'How many days to get to Tau from America?'

When I explained that we had been more than a year getting to Tau he was astonished, and immediately invited me to go ashore to see the three white men who were on the island.

'You go on shore with Apelu,' he said, indicating one of his fellows. 'I good sailor — I stay here.'

Apelu got the canoe through the pass safely, although I expected a swim. It didn't much matter, for a driving rain wet me as thoroughly as a plunge could have.

There were four Americans on Tau: Raymond Hood who was in charge of medical work, with his wife; a sanitary

inspector; and a wireless operator.

Î enjoyed meeting the Hoods, because they were in love with their work, interested in the natives, and rejoiced at their good fortune in getting the post. It is too bad this attitude is not more widespread. I found later, in Pago Pago, that many of the Americans stationed there were doing their eighteen months' service as if it were a prison sentence, bewailing the lack of conveniences and amusements of the city, monotonously counting days until their

period would be up. This is an attitude often assumed in similar places. I have little respect for those who affect it, for anyone worth knowing should find within himself, or in the things and people about him, sufficient interest to ward off boredom.

Svaap alone out there in the murk worried me, so I only stayed ashore a few hours. Soon we were under sail once more.

That night the cheerfully winking light at Aunuu Island off the end of Tutuila, popped over the horizon. Only twice before in the South Seas had we had a light to guide us.

Morning found us at the entrance to the passage between Aunuu and the main island where we met quite a tide rip, but soon we were coasting along lovely green shores with alternate patches of bright yellow sand and abrupt bluffs. A road worked its way along the coast. Here and there homes peeked out from behind the palms—a coloured roof, a bit of thatch, a thread of smoke. Then we opened up the approaches to the great bay.

To sail into Pago Pago Bay is one of the achievements of a lifetime. Great mountains hem you in. You enter deeper and deeper and think you have reached the end, wondering that there is no sign of habitation. Suddenly you round an unnoticed point and discover the real harbour — completely hidden from the sea. There at the foot of a mountain, dominated by two immense towering radio structures, lies the American Naval Station.

A few native craft and the bonito canoes escorted us in. A great thirty-two oared long-boat flew past with a tattoed native crew, a coxswain, and a man in the bow beating time on a drum. They sang as they rowed, for the Samoan is like other Polynesians, with a song for every occasion. As they drew near we saw that they were not all men. Women pulled their oars just as lustily as the men. Both sexes had

the beautiful physical development which is a characteristic of the Samoan. Both men and women wore the lava lava or loincloth of their islands, the women adding a blouse or some upper garment.

The influence of mission and civilization has so thoroughly penetrated the Polynesian groups that women almost invariably cover the breasts. But as one travels westward, reaching more primitive groups — Melanesian, Papuan, and Micronesian — one finds less and less clothing. In Fiji only a loincloth is worn by both sexes. Generally in the New Hebrides the men wear a little bark loin strap and the women a short grass fringe, but I found some tribes absolutely nude. The same applies to the Solomons. In New Guinea one finds great variety. In some regions both men and women wear something, in others the men wear a loin covering and the women nothing at all, and sometimes the reverse holds true, or both go nude. The extreme variety in all branches of culture among the various Western Pacific tribes never fails to interest.

We were of course curious about the tattooing of the Samoans, for we had not found it in the other groups. Here, as someone has said, 'A man is not a man until he has had his pants tattooed on'. The missionaries tried to abolish the practice, and later laws were made against it, but it is still widely practised. A young man is not supposed to meet other men on equal terms until he has been tattooed.

The tattooing of a young man is accompanied by feasting and the giving of presents. The design is practically the same for everyone — a solid colour from a line above the hip bones down to the knees. The operation is naturally very painful and takes days. The young man is apt to be laid up for several weeks and there is an occasional death.

A few of the women tattoo also, preferring small designs on the legs or the back of the hands.

The custom will doubtless disappear before long, but to-day it is quite prevalent.

It was a tremendous change to drop suddenly from the indolence and leisure of the islands into a model of American Efficiency with officials for ever consulting, reports being produced and read by the score, messengers dashing about as if their lives depended upon it, and typewriters

and calculating machines rattling away frantically.

TIME — that unknown quantity in the islands — had suddenly taken on a vast importance. DETAIL likewise. The Commander was upset because the naval laundry cleared only \$20 the previous month. A dozen mislaid shovels put the whole public works department up in the air. I went about in a daze meeting all the officials under the guidance of a friendly customs official. I was an intruder from another world as remote as the farthest star.

Samoan dancing can be good or bad. I saw some 'Sivas' that were as fine as any dancing in the Pacific. One night I saw the worst. It was only a guise for the ulterior motive of financial remuneration. There was only one who could dance - a tiny little tot who was charming. The rest strained pitifully in an attempt to simulate sex appeal, thinking thus to entice a few coins from us. I can think of nothing more revolting than to watch a troupe of filarial beggars use a miserable Siva as an excuse to collect money à la Salvation Army, dancing with a tin plate in their hands.

There was one amusing, although pathetic incident. A woman came out to dance, wearing the Siva skirt and the usual brassière. The latter revealed the outlines of unusually beautiful breasts. Nothing is more admired in a young Polynesian woman than full, well-rounded breasts. Later, with the agitation of the dance, strange things began to happen to the woman's figure. The beautiful breasts, curiously enough, became misplaced, the brassière slipped down,



Etera

and two half-round coco-nut shells fell to the ground and rolled away. The woman bit her lip and held the narrow band of fabric up to cover empty, flaccid breasts. She danced on, but her eyes were moist.

On the whole I was disappointed in the Samoan natives, perhaps because I did not get to know them in the remoter parts where they were unspoiled. Most of those I met were lacking in the charm and hospitality of the Cook Islander or the Tahitian. Some were avaricious and even a bit insolent, but only in the immediate vicinity of the Naval Station. It is unfortunate that close contact with the Caucasian must bring about this change, but it is almost invariable. I have seen cases where exceptional white men have coaxed the natives through that dangerous transitional period, but these have been sympathetic, tolerant, understanding men that are rarely found. Wise choice of white representatives in our islands can be of vast future importance to us. Let us hope that we can benefit by the experience of New Zealand in Western Samoa, and our own troubles in Hawaii, and make something different of American Samoa.

There is still time for this. The islanders are healthy and prolific. The blood is still pure. There is not the conglomeration of races that so complicates the Hawaiian situation. The contamination is not far advanced. Let us not try to make of them something they never can be. We must remember that no race can survive if it must make in a year or so the changes which took us thousands of years. These people are fundamentally peaceful and kind, quick to acquire the white man's vices, but equally quick in modelling themselves after men of fine character. It will all depend upon the men under whose guidance the islands fall.

The non-magnetic yacht Carnegie was also in Pago Pago. Captain Ault and I had become friends in Tahiti. One night

in Samoa we had dinner together with Commander Phelps and his wife. The next day, after giving me final instructions about some scientific work I wanted to do in the Western Pacific, Ault bade me good-bye and sailed for Apia. 'So long, Robbie,' he said. 'We'll meet again.'

Perhaps we will meet again some day - but it will be in another world. Twenty-four hours later Ault was dead. The world lost a splendid man and a valuable scientist. Loading petrol, the Carnegie blew up and burned to the water's edge. Captain Ault was blown into the sea, rescued, but died on the way to hospital.

'Don't leave me, boys,' he said, and then he died.

We were now close to the hurricane season, so we did not linger in Samoa. I was in a hurry to get through Tonga and

on to Fiji to find a safe cyclone cellar for Svaap.

On the way to Tonga we had fickle, in-between-season weather: beautiful breezes with whitecapped seas, sudden squalls with such preposterous quantities of water in them' that the helmsmen gasped for air, heavy blows of several hours' duration that kicked up uncomfortable seas, rainbows and double rainbows and beautiful sunsets and calms. In the calms I ran the engine, in a hurry to get to Tonga.

On the morning of December 2nd we saw Vavau ahead of us, dim and purple. Later we coasted along under the 500-foot cliffs that boldly barricade this island from the north and west, perforated here and there by gaping holes like the homes of ancient cave-dwellers, and level as a monstrous table on top. There was no outer reef, so we sailed close in.

It seemed we would never open out the entrance between Vavau and Hunga, but at last we came to an abrupt point and there stretching in before us was the channel. It led to an inland sea with countless blue and green islets of all sizes and shapes.

We sailed in among the little islands as the sun dropped low and the breeze became lighter. Little cutters loaded to impossible depths came out past us with singing and laughing crews. Several motor-boats came out and ran close alongside.

'Where from?' they would shout, and go on their way.

Then, reading and following directions in the Pilot, we found the last turn and slid through the narrows into the perfect landlocked harbour of Vavau, girded by green hills. We were in the last Kingdom of the South Seas.

Tonga is the only remaining Kingdom of the South Seas, having the charming Queen Salote Tubou at the head of a constitutional government under British protectorate. Salote Tubou's kingdom comprises roughly a hundred lovely isles with an area of perhaps 300 square miles, and a population of 27,000. The people are Polynesian, like those of the groups we had already visited, but their language is so different that even Etera could not understand a word of it.*

Queen Salote is assisted by the Premier, the Hon. William Tugi (a handsome, princely native) and by a Privy Council and Cabinet and Legislative Assembly. Something very similar to the old English feudal system of land tenure prevails. Property is owned by the crown or by nobles, but the law states that:

'Every male Tongan subject who has attained the age of 16 years and is lawfully residing on the estate belonging to any Noble or to the Crown shall be entitled to a village allotment (of land) and a tax allotment in such estates or Crown land.'

^{*} Heretofore we had been able to converse with natives wherever we went. For the next two years we rarely heard a familiar tongue. On board we spoke nothing but French, for Etera and English were mere bowing acquaintances. Part of the time we were in districts where we found European residents and could find some mutual language. Sometimes we could use pidgin English. The rest of the time we were up against a blank wall. Soon we learned the rudiments of a sign talk that enabled us to exchange simple ideas with natives almost anywhere. Supplementing this with a few key words of the local language which we would immediately learn upon arrival, we always managed to get along.

But the law goes still further. When a man reaches twentyone he must build his own home on his allotment. There is a system of home and village inspection which encourages pride and well-being.

The system works. Tonga is prosperous. There is no poverty, for every man has his own home and his land from which with a reasonable amount of effort he can make a living. The little kingdom has no public debt, and there is even a surplus in the treasury - something which must make the Great Powers a bit envious in these days of depression.

The Rockefeller Foundation, which has accomplished a tremendous amount of good in the Western Pacific, showed them the way to better sanitation and health, and now the Tongans are ahead of all the other groups in this respect also.

Vavau is a lovely harbour. Svaap nestled there upon the smooth warm water like a jewel on a woman's breast. But ashore, blind to the beauty surrounding them, a drinksodden clique of white traders spent half their waking hours in an everlasting game of spinning a 'put and take' top, or shaking dice for the drinks, quibbling about a tuppence won or lost. The club building was anchored against hurricanes with heavy cables which went across the road to concrete emplacements in the hillside. They were loath to lose their most valued building.

It was December already. The hurricane season was ready to set in, so we hurried through the group. One day we came to Kapa Island, where we found Thomas Ellison, a solitary white man trading for the big Burns Philp Company, the 'Octopus of the Pacific', whose interests extend in infinite variety among the island groups, whose steamers are often the only means of travel, and whose traders control the very lifestream of commerce over many thousands of square

miles.

We came to anchor in a stiff 'trade' off the village of

Otea — a group of tiny grey huts nestling behind a clean sandy beach among the palms and ironwoods. The sky was blue, with snowy scudding trade clouds. The water shaded through intense sapphire to emerald at the shore. We could hear the wind singing in the palms and the water caressed the bow in sparkling wavelets. It was a lovely little island, its curving lagoons all lined with graceful golden-hued palms.

The Ellisons insisted upon our being their guests and did everything possible for us. There was Thomas the father, his pleasant half-caste Samoan girl-wife from Apia, five-yearold Iris, and baby Thomas. Connected with their house was a shack with a small store of trade goods and copra-drying platform. Trade was largely in terms of corpa versus goods. Little money changed hands. The place was typical of most trading posts in the islands although Ellison was not typical of traders to-day. He came from an older school of whom not many survive. He recruited savages in the old days, worked plantations in all the western islands, traded and planted in the Solomons, New Guinea, New Hebrides, and so on. But now, to get away from the malaria that eventually gets them all in the Melanesian and Papuan territory, he had come first to Samoa, where he had found the girl, and then to Tonga with its lovely climate and freedom from fever.

There is a distinct line separating the malarial islands from those that are free from this plague. Fiji, and all the islands to the east of it, do not know fever. Once west of Fiji, you are in the malarial region and must exercise extreme caution. I was very lucky, for I spent nearly two years in malarial lands without becoming infected. Proper living, protection from mosquitoes at night, and the use of quinine (the efficacy of which is doubted by some authorities) enabled me to escape.

On the north-west point of Kapa is an abrupt bluff which shelters the famous Grotto of the Sea. I had come to Kapa for this, and eagerly sought the entrance in a small boat. It was high and deep — deep enough to let a cutter sail into the face of the rock. It was a gateway into the heart of the cliff. Entering, we found ourselves floating in a multicoloured domed vault with a brilliant spotlight of sunshine boring deep into the water from a hole near the entrance. A peculiar smell assailed our nostrils, and our hushed voices shouted back at us from the walls. A deep ravine cut back into the heart of the mountain — out of sight. A projecting rock rang out when struck with an oar, reverberating in our ears. The colourings were magnificent, with pale greens and blues in pastel effect setting off the more vivid tones. It was a Poe-like setting, a dream-cave.

I scrambled up on a shelf to take a picture but could not get off again. So I tossed my things down to the boat and dived in. The water was deliciously cool. I swam about on my back to view the high-vaulted roof, and with my face under to watch the splendours of sunlight shimmering down through the water, where fathoms down it illuminated grotesquely the caves and pinnacles. Then suddenly I floated over a great black subterranean void. Thoughts of the giant Tonu* flashed through my mind, and less tangible dangers that seemed even more compelling to my suddenly aroused imagination. Back on board I felt curiously excited. Why had I hurried? Who knows?

The day was almost done when we returned. Soon the church drums started, the Free Wesleyan. There are long tiring services every night, children first and all later. There are Mormons here also, but not so strong. While the trend at home has been toward much more freedom, the brown peoples of the earth are getting an overdose of religion.

^{*} A giant man-eating rock cod, that accounts for several pearl-divers each season.

This applies in particular to the Tongans, who are never for a minute away from its ever powerful influence. A few fine, and many ridiculous and unnatural laws have resulted from missionary influence. There are Sabbath Blue Laws that would put the most strait-laced old New England Puritan to shame. There is a law that 'Whoever shall permit a stallion to cover within the boundaries of any village shall be liable to a fine ...' There is another that makes 'Exposing the person in the sight of any person, or being without an upper garment in the road within any town' an offence subject to fine or imprisonment.

One of the most amusing of all the mission accomplishments is the official 'pillow smeller' of a certain island. Members of the fair sex here anoint their hair regularly with a certain odoriferous oil of native manufacture. It is the duty of the pillow-smeller to make the rounds each morning of all the bachelors' homes, relying upon his olfactory sense to discover if anyone has succumbed to temptation. This might prove a good field for unsuccessful prohibition agents with more than normally acute sense of smell.

I am reminded also of Wallis Island, where the French Catholics lock up the unmarried boys and girls in separate dormitories with the coming of night. One could give innumerable incidents showing a strange missionary perversion on the subject of sex and personal freedom. As the missionary in *Rain* says, the hardest thing is to teach the native, who lives according to the laws of nature, the meaning of sin.

Our time in Kapa was up all too soon. I should like to return some day and anchor in a certain little impossibly blue and gold lagoon that I discovered the last morning. There I would stay and feast upon the beauty of it until I could hold no more; then I would sail away, away from an island—

'.... lost in an idle main,

Where the sea-egg flames on the coral and the long-backed breakers croon

Their endless ocean legends to the lazy, locked lagoon.'

We sailed south along the line of weakness in the earth's crust which accounts for the straight line of volcanoes that divides the South Pacific with a great broken Barrier extending from Samoa all the way to North Island, New Zealand, making one of the greatest chains of active and dormant volcanoes in existence. In one day's sail we checked off six of the links in this vast chain, six isolated volcanoes thrusting their dirty grey heads cone-wise out of the angry sea.

It was a flying, storm-tossed dash, in a howling easterly that - although we did not know it at the time - was the forerunner of a hurricane. Had it not been for the partial protection afforded by the Haapai Group and all the reefs

to eastward of us, we would have been hove to.

One hundred and seventy-five miles we did that twentyfour hours, largely under only jib and jigger. We saw the first cone, Late, from a distance — purple against an angry sunset. Metis was next. This was an island in 1886, but has eroded or subsided to sea level and is now a dangerous shoal, so we steered clear of it. Kao and Tofua we passed at midnight, so close we could feel the trembling of the surf but could not hear it for it blew a gale and we passed to windward. Imagine a monstrous black spear cleaving skyward - only two miles across but 3400 feet high, sides rising symmetrically in a perfect cone. That was Kao. A little later a faint blur ahead again. Then a sudden flash of lightning sears a picture of stark detail and we are past before we realize. That was Tofua. Then nothing but blackness until a delinquent grey dawn shows us the billowing plume of an erupting Falcon Island ahead. The fine driving rain draws a curtain astern and hides our

signposts of the night.

Were there nothing else of interest in Tongan waters I should have come anyway to see Falcon. This oft-reborn infant child of the Pacific had caught my fancy. The weather precluded a leisurely examination, but perhaps this wild grey scene was more impressive than would have been a calm peaceful one. Probably most of us have heard of Falcon, but wonder what it is all about.

Long ago La Perouse and Maurelle both reported a bank here. In 1865 H.M.S. Falcon found a breaking reef and in 1877 the Sappho encountered a column of smoke and steam mounting skyward from the sea. Then in 1885 a long continued eruption threw out material and built up an island 300 feet high that disappeared nine years later, reappeared again, was gone again in 1898 and made another temporary appearance in 1900. Then it was lost for years - forgotten until 1927 when the bowels of the earth opened once more and the submarine volcano spewed itself up out of the sea to form the present Falcon Island. This eruption rose over 4000 feet and left an island about 300 feet high. Continued activity has caused it to build up more and more. When we paid our respects it was more than 600 feet above the sea.

Falcon put on a good show for us, erupting furiously. Strangely enough, it ejects nothing but loose ash and cinders and vast quantities of smoke and steam. As a result it is constantly slipping down and being undermined and

dispersed by the sea.

We drove past, close, and soon lost Falcon astern in the murk. Midday brought us to Honga Hapai and Honga Tonga, two more of the great chain. Two miles farther south we came to a submarine volcano emitting smoke and vapour from the sea

It was a wet job on deck, and demanding, for the seas were big. We were trying to make Maria Bay, Tongatabu,

which Tasman discovered in 1643 and called Amsterdam. Amsterdam was forgotten after that, so that when Cook came there in 1773 there was nothing but a vague legend of white gods in great winged canoes to tell of Tasman.

This reef-infested region was no place to spend the night. It grew late. We could never make port. On with the mainsail, reefed. She managed to carry it, rail under, but we were going some. And so we piled in through one of the several passes into the great bay just as it was growing dark, and groped our way to an anchorage. Our flying twenty-four-hour tour of Tonga's volcanic fence had ended. We had sailed 175 miles.

In the morning we made sail and beat through Egeria Channel with half a gale blowing. We thundered about like a Gloucesterman at the end of our short tacks and anchored off Nukualofa, the capital of Tonga, just as the little steamer Tofua came in from Suva. The Queen's Palace and its gardens (where lives to-day a tortoise presented to the old king by no less a man than Captain Cook on his last voyage) hid behind a stately row of imported

Norfolk Island pines.

Aboard the *Tofua* later, Captain Presser explained the weather by producing the radioed track of a hurricane which was then in the Fijis and which might swing through Tonga. A penetrating cold rain was driving in from the east. As the Tofua was the driest and most comfortable spot in all Tonga it was naturally the place to say. An interesting little band of mature islanders gathered aboard. As one goes westward across this vast ocean whose width is half the earth's circumference and whose waters cover a third of the surface of this globe, one meets with more and more of the veteran islanders — men who carried on when blackbirding was in its prime — pearl buyers — guano men — just plain soldiers of fortune — and now and then a beachcomber. All are afflicted with a common disease: wanderlust.

The talk ran through the various phases of island life and swung back to the old topic: 'Once an islander always an islander' — as it is apt to do when these men talk of what is nearest their hearts. All agreed that when a man has stayed years and talks of quitting, it is to an idealized home country (which will prove a disillusionment) that he would go; and that should he go and not die too soon from the abrupt change, he will be back again. And it is true. Once the charm has got in its work, the story is usually done. They may go, but soon they long for the islands. The other life irks. It is futile, artificial; the people not real. The call of the islands is strong, and will hold them in velvet bondage.

Lunch carried on the discussion, and until late afternoon it lasted, when the final blast of the whistle drove us out into the storm. A last radio came through from Suva.

'Expect cyclone to go through Tonga,' it said.

The steamer left. She would steam out to sea, away from the far flung Tongan reefs, and could avoid the hurricane. We could not sail fast enough to do that. We would have to ride it out where we were. There were three of us — a large Klan freighter, a Japanese Diesel-auxiliary schooner, and Svaap. The island cutters had fled long ago to the shelter of a motu five miles farther east. If the storm centre came our way we would have to join them. Nothing could live off Nukualofa. We were fast to a steamer mooring, waiting.

Thus began the most strenuous week I have ever undergone. The log will describe better than I can now the experience of riding out a South Pacific hurricane. It was a continual battle between optimism and pessimism, first one having upper hand, then the other.

Tuesday, Dec. 10 - The hurricane appears to be going

through the group all right. Absolutely no change in the weather here; blowing a gale from the east; varying perhaps three or four points back and forth. Glass stays at 29.60, and a cold persistent rain drives across the bay. Everything is damp below. Temperature 76. Wonder what it will be like here if we get full blast of it. This bay would be terrife. terrific. No protection to speak of, only a coral reef half a mile away.

Noon — The barometer has gone to 29.55 — the lowest I have seen it in this region of little variation. On shore they have hoisted out all except the harbourmaster's big launch. There is not a soul in sight. The long row of Norfolk pines stands guard over the palace and the Tongan flag waves defiance in front of the custom-house. The wide clean plaza is deserted, and all the white houses with their red roofs seem prepared and waiting. The palms bend and sway, grey sheets of cold rain sweep across the bay and bombard the village. Angry grey scud flies by, low overhead.

Wednesday, Dec. 11 — I am as completely isolated from the world here as if I were marooned on a desert isle. There has been no communication with shore since day before yesterday. They might at least put up a signal to let us know whether the centre is going to hit us or not. It is the suspense that is hardest. Glass is 29.53, and gale the same strength, varying around east with rain most of the time. We plunge badly now.

2 p.m. - It seems we are in for it. The wind took a sudden veer to the south, jumped around a bit and then back to east again. Then the harbourmaster got going in his powerful launch and carted out an emergency crew to the Japanese schooner which immediately began to show signs of action, belching clouds of black Diesel oil smoke. Then he came flying past us with a shouted message:

'It looks like we'll get it. Better move over behind Pan-

gai Motu.' And abandoning us to our fate he went on like a modern Paul Revere to warn the Klan steamer. The ship at once got going and steamed out against the wind, around the first reefs and behind the motu.

With jib and jigger on her we cast off the line and one chain. Before we could get going the second chain to the buoy snapped. I heard the frantic cries from Etera. We were adrift, driving straight for the shore reef. She would not come about. Svaap, usually as quick and clean on her heel as any ballet dancer, came dragging around as if stuck in the mud, and drove for the reef. The reef was under us. By the grace of all the angels in heaven we managed to gybe over the jigger which knocked her about so that we just slid past the wharf and out. Then I found about five fathoms of chain hanging over the bow, explaining her refusal to answer the helm. It had parted near the buoy and acted as a drag.

A heavy beat through patches of reef, and at length we nosed in with all the little cutters seeking shelter behind the motu. The steamer had already anchored out farther, and soon came the schooner. And so we are waiting, two big anchors out, on either side of east, the third held in abeyance for a time.

Glass has not been jumpy, but has been 29.50 since middle of morning. Sun breaks through now and then with occasional waves of rain. The Tongans are very nice. They come over and politely ask to see the boat; no craning of necks or rudeness as in Samoa. We have one on board from Eua, the 'Middleburg' of Cook and the early explorers. He is helping with the anchors.

4 p.m.—It is like a sentenced man awaiting execution. Through it all runs the hope that maybe it will misfire. If it does hit here, from the length of time it takes to arrive it ought to be a beauty.

The glass drops slowly as fate.

Over there, behind our sandy point, lie the seven cutters, the five larger ones snuggled together as if for protection, and the two tiny open ones way up almost on the beach. We have come to the other side of the point so as to avoid being on a lee shore should the wind shift northerly as I think it will.

5 p.m. - Glass the same. This waiting is torture. I can't bear the thought of losing the faithful little ship here in a miserable hole of a rotten harbour without a chance to fight. Third and last anchor is down. Cutters tying up to coco-nut trees. We envy them that, but draw too much water to get close enough. Blowing harder. ENE. now.

6 p.m. - Going to be a hell of a night. I only hope we don't get the centre of it, for if we do in this hole it is all up. Our meagre anchors would fail us, I am afraid. The harbourmaster's launch has retired to the safety of a little cove we cannot enter. They did not even take the moment necessary to give us the latest radio news. The wind now, and for several hours, has come steadily instead of varying as yesterday.

I have never seen clouds travel so fast. They are not solid, but splotchy, and go zooming by, very low. The palms on the motu bend and give easily in the wind. Funny how the continual moan of a gale like this can drive one almost mad. If it would only change its tone, you beg, and kick yourself for the thought, for you know that if it does it will probably change to a shriek that will be the forerunner of disaster.

We sit and tap the glass every few minutes. It stays at 29.50. If it comes in this quarter we may land right on the freighter. She is veering badly. The Jap seems to be riding well. We veer a little, not much.

8 p.m. — Still the awful suspense. Clouds seem to be coming from NNE. now although the wind holds its old direction. The moon breaks through now and then and has a big halo. Etera is O.K. Not the least scared; willing every moment. He has certainly proved a wonder. The steamer's lights astern help, showing that we have company.

Thursday, Dec. 12, 2.30 a.m. - Before midnight there was a sudden shift to north in a terrific blast that heeled us rail under and held us there. Then back to ENE. Glass has tumbled to 29.40 and wind is now NE. Hardly possible to stay on deck. Clear sky now. Stars. Steamer still O.K. Can't see the schooner. The worst should be soon upon us with a barometer like that. Comforting to have it clear, but it would be more so if the glass would go the other way for a change.

4.30 a.m. - Steady at 29.40. Gale from same quarter. The little wharf light at Nukualofa winks leeringly at us as

if to say 'Well, how do you like it out there now?'

8 a.m. - No change. Steamer riding badly. Rain squalls. Seems to be working a bit to northward. This is the fourth day. In the violent shift last night the wind went completely around the compass, for our chains had a turn that had to be straightened out.

9 a.m. - Wind nearly north now so all the cutters are edging around the island, like a squirrel around a tree. We start the same tactics soon when the wind gets west of north. They are all on our side of the motu now. We were correct in anticipating the change. One must crawl to move around on deck.

Noon - There is a lull, which we expect will be followed by the worst. It is sunny with hardly any wind. Glass rose half an inch but is now down to 29.42 again and dropping.

2 p.m. - This is the most leisurely damn hurricane I ever heard of. Here we are still waiting, barometer 29.40 Llovely sunny day, cutter crews sewing sails and calling back and forth and on us. Gramophone concert for assembled natives. Music between the halves of a hurricane! Glass going down like an elevator, 29.36 now.

6.30 p.m. — We too sewed sails, shifted an anchor or so to edge crab-wise around the motu for more protection from the NW. But under all runs that abominable apprehension, a feeling of something to come. To-night will tell the story I think. There has come an uneasy swell around Pangai Motu, the familiar little isle to which we cling so lovingly and whose every tree I know by heart. There is a nervous lift to the boat. Overhead, clouds are racing from the NW. The moon is three-quarters full.

9 p.m. — Beautiful moonlight night, only the barometer and that broken film of low wispy cloud shooting by to worry us.

Fri. Dec. 13, 3 a.m. — Glass down to 29.35 and blowing

harder and unsteady from north. Clear as a bell.

10 a.m. — All fine but the barometer. It must be some disturbance to last this long. Lord help somebody somewhere. Just a nice moderate gale now. NNW. now. Only thing I fear is its going to west.

8 p.m. — This is the most ridiculous hurricane I ever heard of. The glass refuses to leave the vicinity of 29.35. Just the same moderate gale all day. Wouldn't mind being at sea in it at all. The steamer took heart and re-rigged her cargo booms, etc. She had completely stripped. I am going to quit keeping an orderly account of the thing. It may last for ever.

II p.m. — I was too optimistic. It is coming at last. Enough wind now to satisfy anyone. Gusty.

Sat. Dec. 14, 2.30 a.m. — It is here. Glass gave up in

Sat. Dec. 14, 2.30 a.m.—It is here. Glass gave up in despair and fell to 29.28. There is a high-pitched screech in the coco-nuts now. Sometimes a tree crashes. No longer is the sky beautiful. It is ghastly. One needs all his strength to stay on deck lying flat. It would not be so bad if we did not plunge so. Quite a sea comes around the point of our island, even though it shelters us from the full force.

3 a.m. — There come fragments of words from the cutters

ahead. Activity on all. A sudden strong current runs the wrong way and sets us into the sea around the point. Hope it changes with the tide. Still holding. All our anchors are down and all our chain is out. We have even attached pig iron ballast to the chains to give them more weight. Wind like this can't last long. Getting more westerly which is good, for the hurricane should blow itself out in the west. But it is also bad, for our shelter ceases when it gets past WNW. It is now a gamble. Will it ease up before it goes past that point or will it go full west first? We can, but I hope we won't, drag about a quarter of a mile before bringing up on solid reef. That is, in the direction it is blowing now. If it goes west we can only drag two hundred yards.

now. If it goes west we can only drag two hundred yards.

5 a.m. — The Salote Lifuka is dragging down on us. We are just in line and there will be trouble. Curious vibration

throughout ship, like a great 'cello.

6 a.m. — Just to cheer momentarily when things look darkest, the glass rose to 29.30, but I am afraid this will be the worst now. The cutters are again stripped — booms off, sails below, all running rigging off. We are stripped to our standing rigging too, to give less resistance to the wind. Wish we had more chain. The Jap schooner is going ashore. Steamer also stripped again but riding well, two anchors and steaming ahead all the time. It is of no use for us to start the engine, for the propeller would be mostly out of water in the plunging. It isn't the wind that makes you drag first, it is the sickening upward lurch as a sea passes under your tethered bow. The chains bring up taut, and if the strain is enough the hook will give a bit, or maybe the chain will — and then?

7.30 a.m. — We have dragged a little, but we have now come to a stop. Have a hunch it is nearly over, that this is the last effort of the storm. Glass shows signs of life again. It is time, for this is the sixth day. Getting quite a sea from around the point but we thank our stars for what gifts we

have. Suppose Pangai Motu were not there? I read frantically between jumps to the hatch and barometer, and have finished several books but have no idea what they were all about. Three books in one day yesterday. Must do something to keep the mind off this interminable storm. The ceaseless strain builds up such a mental tension that I think a man would soon go insane.

There are amusing aspects though. The next boat to windward, the Salote, which has been stopped in her dangerous game of dragging, is about 40 yards off. They let their dinghy out on a rope with the captain clinging to it. Thus he pays me a call to look at the barometer, borrow a match, and some rope to run another line ashore. Then he gets towed home through the flying spray, gale, and sea, laughing supremely all the while. I don't know more than ten words of his language. He knows none of mine. We get along fine. Cutters had a lesson. Started calling without a rope home and couldn't get back. Pretty soon we'd have had the whole gang aboard, but they floated a line down to us and so were able to haul the dinghy back. They are flitting about like the amphibians they are, moving closer in with the wind changing to west. The shore line on one parts, but her anchors hold till it is replaced. Clear as crystal again. Houses in Nukualofa across the furiously white bay stands out abruptly, and the Norfolk pines look toweringly high. Barometer, improved, 29.40. The worst is past.

3 p.m. — Had an exciting and strenuous hour's work shifting all three anchors with the help of the natives. Not much better off, but a bit more protection from the sea. Concert aboard and biscuits all around. Music rather feeble in competition with noise of storm, but received with many 'Malos'.

A whole week wasted. But I did get to know the Tongans a bit. I do like the way they co-operate in saving their boats and their willingness to offer help without being asked.

They turn to, the whole lot of them, and tackle the first boat to be moved. That finished they go for the second, then the third, and so on. We start sweating up an anchor and they pile over and help. Etera likes them too; compares them with the Samoans that used to stand about and gape at him as he worked. I could see now why Capt. Cook named these the Friendly Isles, even though he perhaps questioned the wisdom of this later when exasperated at the continual thieving of the natives. To-day I could find no sign of this disposition toward petty stealing, and presume it to be a lost trait.

7 p.m. — I think it has blown itself out. The glass remains at 29.40 which is much better, and the wind has got around to WSW. with showers and sea going down. Guess we get out to-morrow. The launch came out of retirement this evening and wallowed by to shout a query, 'All right?'

Said Etera, 'C'est fini - le bombardmente. C'est pas bon,

cette guerre du vent.'

The alarm clock called again to-night. That has been the most amusing thing of all with the Tongans. The dignified captains are too sensitive to just barge over and ask to see the boat. The first evening when it was not too bad one captain and a mate came over with an old alarm clock to get the right time, and paid a bit of a visit. The next day came the captain of another boat with also a clock to set. While setting it for him I noticed it was the same clock. And so they have passed it around, each time it was another's turn to come with it.

Peace after the storm. A cool west wind. A full moon lighting the isles with silver brilliance. Etera snores happily.

Sunday, Dec. 15th — Re-rigged ship and sailed over to Nukualofa at noon with a beautiful south-west breeze, and learned of the damage done by the hurricane. The most unusual episode was that of a house which was being trans-

ported bodily through the air by the wind. The floor gave way and three children dropped out *en route* and came back to earth — sustaining merely broken limbs. The house, curiously enough, was deposited some distance away, not unduly damaged.

Later I saw at first hand the terrific losses that were sustained in the Fijis: villages blown to pieces, plantations ruined, fruit gone, tremendous floods, small craft lost, and so on. A solitary survivor from a sailing vessel that was lost drifted for nine days without food or water on a tiny raft, and was rescued. At the first island we touched on the way to Suva, we were told of a cutter and six men lost from there.

With this object lesson we did not linger in Nukualofa but put to sea as soon as possible for Fiji, and soon were 'hull down, on the trail that is always new!'

CHAPTER XI

For two hundred and fifty miles we sailed in a tremendous left-over swell, through a sea dirty with a scum of volcanic ash. Broken palm boles, coco-nuts, debris of all sorts, and bits of white painted wreckage that disclosed the last grand tragedy of some unknown lives, littered the way and spoke eloquently of the recent storm's ferocity.

A peculiar phenomenon occurred one midnight — something I have never seen elsewhere. There had been a fine rain. Then the moon came out to bathe the sea in brilliance, and for a quarter of an hour two perfect arcs of intense white light arched across the southern sky in a double night

rainbow.

We were fighting a bad stern-bearing leak these days. It had been increasing for weeks until now it became dangerous, requiring almost hourly pumping. Thus we were hurrying to reach Suva, where Svaap would be overhauled.

One day as we sailed through the early morning haze, we saw the first fan-like cluster of Fiji's countless isles slowly resolving into clarity before us. It was the southern extreme

of the Lau or Eastern Fiji group.

I shall never lose that thrill of landfall upon new lands beyond the sea. To me it is one of the greatest of all rewards. And so my heart was glad as we sailed along a winding quiet reef in the lee of an isle called Ongea Levu, while the tropic sun played havoc with the spectrum in the coral-cupped waters of the wide lagoon. Coral beaches blazed, and countless tiny mushroom-like coral islets stood in disarray, scattered about the branches of the inlet we found.

The chief came out in his canoe, the triangular sail of

woven matting dropped, and we made our first Melanesian friendship.

For several months we explored the Fijis, keeping always within reach of a good haven in case of another hurricane. We were marking time until April, when the resumption of the south-east 'trades' would usher in the good season.

I came to be very attached to the kindly Fijians with their marvellous physique and their gorgeous islands of infinite variety. For the first time we found what really primitive life could be, for on the outlying islands civilization was so far removed as to be almost unknown.

My dream was coming more and more true. It came to me with suddenness one evening at the wheel, as we slipped silently through the waters of the Koro Sea, bound for Suva. A thin curl of smoke drifted away from our stack . into the night, and an appetizing aroma of browning fish came up to me as Etera prepared our evening meal.

Overhead, the white sails stretched their arms to catch the night wind. They were my sails - my wings - and they

had brought me to the sea of my boyhood dreams.

I had always planned this, it seemed, but it had been almost too much to hope for. So now my heart was full. Another of my plans had come true. We had successfully weathered storms and dangerous seas, had evaded disaster closely several times, and through it all had grown to have unbounded confidence in Svaap. If we could only co-operate with her she would take us to all those other places of which I dreamed: to the great dark island of New Guinea, to Komodo and its dragon lizards, to Bali the lovely, and to India and Arabia. Perhaps I might even watch the moon rise over Athens, and roam the hills of Ithaca where Odysseus played as a boy. Oh! - so much there was to do that I suppose I should have been awed by the grandeur of it all - but that night in the Koro Sea I had a feeling it would all come true. Perhaps I had a vision — I don't know. But I was filled with the knowledge that I must always go on, and on, and on.

Fiji held much of adventure for us. One whole month was spent on Moala - one of the most primitive of all the islands. There was no white man there — no English speaking native to make things easy. I had to learn enough of the language to exchange simple thoughts, and thus gained the confidence of the people. I practically lived the life of a Fijian that month, throwing myself eagerly into all their activities, studying and learning all the while.

The month on Moala was over before I realized. After an interminable exchange of presents with all the people of my particular village we sailed on through the various islands and finally reached Makogai, one of the most pic-

turesque of all Fiji's isles, and the most tragic.

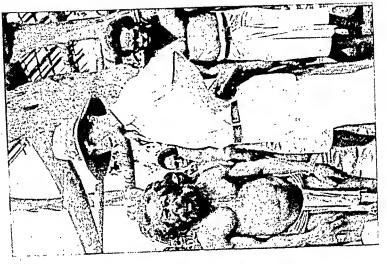
Makogai is the leper island for the Western Pacific. Dr. E. A. Neff, who was in charge of the island and its Central Leper Hospital, had invited me to visit them. For two weeks I enjoyed the hospitality of the little family of three, the doctor and his charming wife and little daughter, isolated there in a depressing but increasingly successful work.

This young Canadian has become one of the recognized figures in advancing the knowledge of medical science as

ating to leprosy.

ne of the greatest living authorities on the subject has ne of the greatest living authorities on the subject has said that the brilliant record of the work at Makogai can be apply only three other stations in the world, one in Hawaii, one in the Philippines, and one in Korea. It rather su who contract this dread disease now can be cured, for it has long been believed incurable. It is one of the triumphs of modern medicine.

An epidemic of dengue fever swept the island while I was there. The coctor was one of the first to fall ill. Strangely enough I exaped, and was able to join Mrs. Neff





in nursing the patients, and to learn at first hand something of the lives of these people who dedicate themselves to this humane service, and of the lepers themselves.

Svaap had one of her closest calls here in Makogai. A very heavy blow came up without warning and caught her anchored in an exposed position. Only by slipping the anchor and chain were we able to get under way in time and seek shelter behind the island. Native skin divers later recovered the anchor and chain in ten fathoms of water. Although I have seen a great deal of diving it never loses its novelty. The very idea of man showing such aptitude in a totally unsuited element is fanciful. I have actually seen pearl divers go down entirely unprotected and naked, and wander nonchalantly around on bottom collecting shell, twenty fathoms deep!

In Suva Svaap was overhauled. Two days after she left the Government slip and sailed to one of the other islands, a tornado hit the very spot we had vacated, demolishing the forty-ton ketch that had replaced us on the ways. Without the help of luck like this at times, even all my methodical planning, care, and vigilance would not have brought Svaap safely home. Fatalism must play an important part in the

philosophy of anyone living a life such as this.

Everyone else in the Fiji Islands having contracted dengue and recovered, I had to get it the day before I planned to sail for the New Hebrides. It is a miserable sickness — mosuito borne — that causes terrific fever and chills, severe pained aches in your bones and joints, and a strange mental epression that gives you the disposition of a trapped nimal. I did not go to the hospital but stayed aboard Svaap. In of the kindest women in the world nursed me through and ten days later I was well. This was the only sickness that I had on the entire voyage of three and a half years, wite a remarkable record considering the time spent in healthy countries.

On April 30th, 1930, we pushed off for the cannibal isles, the New Hebrides and the Solomons. We had six hundred miles of open sea to navigate. The 'trades' were late this year and when we experienced a heavy blow the first night we rejoiced, thinking they had started. We flew through the seas that night—rushing wildly with the crests, leaving a tumbling wake of liquid fire. But the next day it ended, and for a week we tumbled about in fierce squalls and discouraging' calms. The trade-wind had not yet set in.

On the night of May 6th a gentle southerly began to blow. Twelve hours later we were fighting the 'Southerly Buster' that ushered in the 1930 'trades'. For ten days this storm raged. One morning a momentary clearness in the peculiar haze that prevails during southerlies revealed a dim grey shadow in the south. It was Erromango, the first of the New Hebrides.

We were driving Svaap off before the most enormous seas we had ever sailed her in. Our stern would be thrown high, the breaking crest of the towering wave would burst under us with a roar and for a breathless moment we would ride forward with it like a surf board. Then we would sink back and slide stern first down the back of the wave, pointing our bowsprit high in the air. It was dangerous — but with the islands before us we had no sea room and could not heave to. And besides — we knew that the little ship could do it.

Snipe shooting is rolling off a log compared with taking sights on a day like this. We were making a landfall of Efate Island. Our position must be exact. With leg clamped about the mizen boom and an arm around the mast, I would wait for a propitious moment to take a quick shot from a wave crest when the horizon was clear. Doubt ing the accuracy I took many to get a fair average. All morning I took and worked sights as fast as I could.

put us within a few miles of the island but we could not see a thing. The haze was almost fog.

Noon came and went. Our eyes ached from straining through the murk. Suddenly a momentary lifting — a dim shadow ahead — then it was gone, but we were content for we knew we were right.

The sea grew worse. We nursed her through, putting oil over the stern, with only twenty miles to Vila harbour. We made it that night, but nearly experienced tragedy because the lighthouse was not lit.

VILA is the capital of that political monstrosity the British-French Condominium, but actually it is French. It is nothing less than a miniature Papeete. The political situation here is, to say the least, extraordinary. There is no other country like it in the world. The French and the British are supposed to have equal rights and authority. Hence everything is in duplicate. Each nationality has its commissioner and full staff. All papers, reports, etc., must be in duplicate. There is a French hospital and a British one. But the legal end of it is the most amusing, for in court sits not one judge but three: a French judge, a British judge, and a Spanish judge, who acts as umpire. Justice must not miscarry in this dual administration. The jumble of interpretation that prevails during a case is indescribable, for besides the European languages there are the native tongues and the bêche de mer or pidgin English. Peculiarly enough, when in the Balearic Islands two years later, I met Señor Moysi Seurch, retired Spanish President of the Condominium Court. From him I learned many of the details of this most interesting court of justice.

There is difficulty in the New Hebrides in reconciling the two opposite policies. The French encourage their subjects to marry natives, and French half-castes become French citizens, with all their rights. The British object to marriage with natives, and refuse to recognize their half-castes who remain natives in status with no rights. All in all, it is a most peculiar situation.

I stayed several days in Vila which is a charming little settlement abounding in hospitality — mostly French — for although the regime is supposed to be evenly divided it is

predominantly French. However, Mr. Joy, the British Resident Commissioner, was also very kind — extending the hospitality of the Residency and all information I wished. I learned that cannibalism still exists to an unknown extent in the interior of the islands among the bush people. It is more ritual or ceremony than anything else. The last white killing was in 1923, on Santo, this island and Malekula being the two most savage and least known. The interior population, Mr. Joy said, is probably very large. That way of putting it is expressive of the knowledge of these islands. The interior is almost unknown. The bushmen live entirely inland, the most distant tribes having contact with the next, who are in contact with others, and so on down to the sea. The real bushmen rarely get to the sea, but runners sometimes communicate back and forth in stages. There is sporadic tribal warfare. Until one sees the character of the bush in these islands, and their configuration, it is hard to realize exactly what savage conditions actually do exist.

It was in Vila that I started on a daily dose of quinine. We were now in the malarial region, the first that we had reached in the Pacific. The old-timers here did not seem to worry unduly about it and said that it would be worse farther to the west. Constant consumption of good French wines, they said, is a good preventative measure. Wines here were very fine and very cheap, so we put in a stock of both red and white varieties.

On May 10th we sailed from Vila late at night, in order to arrive at Epi by daylight. The Southerly Buster still blew, slightly diminished, but still half a gale. It seems perhaps foolish to sail in such weather but we expected it to continue for several days, and if we delayed everywhere on account of heavy weather we would get nowhere. It was blowing with us and we would travel fast.

So, with a full moon we negotiated the very dangerous seas off Devil's Point, a place much feared, and tore down

the lee of the island through the night. Day found us passing the several intervening volcanoes—steep, conical islands like those off Tonga. In the afternoon we anchored behind the reef off Ringdove Bay. There was a small trading station here, belonging to Hagen Company.

Here I had a most peculiar reception. When I went ashore I was very pointedly avoided by the four white men who lived there. Entering the building I was rather suspiciously asked if I wanted something from the store, with the implication that if I did not, what was I doing there. The manager at length warmed up enough to ask me to sit down, but only because I almost forced him into it. Only my curiosity to see the people of 'Mosquito Bay' of Isles of Illusion, made me wish to intrude upon these strange folk. I will say that I have never seen such a peculiar group of whites as these Australians, for although American yachts, or any other boats for that matter, are certainly not in the habit of popping into Ringdove Bay every day, not one of them even came near the beach to look at the strange craft.

In the morning we again ventured forth into the same southerly, and after a very rough voyage came to the Island of Malekula, passing great Ambrym on the way, smoking and rumbling furiously. In the big eruption last year the Government took off some five hundred people and not many were lost. One young Frenchman I met in Vila rescued some 150 natives from the flaming liquid death. The eruption came in the night, which made it all the worse. A white missionary, with wife and child, awakened to find the trickling lava all about. They had paid no attention to the explosions and rumblings, for these occur always. They found their world ablaze with fast flowing lava and the sea boiling. There was torrential rain to make it worse. They found a sheltered mound and clung to it for the night. In the morning they were taken off by a launch. In another

place two streams of lava came to the sea, flowed along the coast and closed off a large triangle of land. Most of the natives escaped before the streams met, but some were trapped within and watched death creep upon them.

We now anchored in Port Sandwich, one of the most beautiful harbours I have ever seen. There we cut our last bonds with civilization for a long, long time. We were at last in the most savage of the Pacific Islands.

It had been a wild voyage across to Malekula, with boisterous seas that continually reared their threatening bulks astern as we fled before them, and a wind that screamed at us. Rain squalls had obscured our destination but in due time the Maskelynes had appeared, and soon the big island itself. We had plunged and wallowed our way to the pass in such a confusion of motion that now — deep in the great still inlet, with mangroves and white beaches, and here a hut in the dark bush, and there a big canoe hidden in dense foliage — it seemed another world.

There was no settlement, but we had passed a shoal and had doubled back around a sandy point into a miniature blue lake where lay a white clipper-bowed ketch and a tiny stone jetty — both swarming with black men. It was in this harbour — which he found to possess many advantages and which he named Port Sandwich — that Captain Cook anchored while he lay at Malekula in 1774 on his second voyage around the world. Here he received a very warlike reception, was the target for poisoned arrows, and landed in the face of four or five hundred people assembled on shore, all armed with bows and arrows, clubs and spears, but who after peace tokens were exchanged made a very favourable impression upon the great navigator, although he calls them the most ugly and ill-proportioned people he had ever seen. He describes them as very dark coloured and rather diminutive, with long heads, flat faces, short curly hair, and countenances which have some resemblance to

that of a monkey. Although it was Pedro Fernandez de Quiros who discovered the northern islands of this group in 1606 — considering them a part of the Southern Continent — it remained for Cook to explore the whole Archipelago which extends in a long chain of volcanic islands some five hundred miles in length, and it was Cook who gave the group its present name.

It was necessary to report to the French resident of our presence in Malekula, and so I started out over the bush trail to his home on the promontory by the sea. It is a gloomy path. There is the silence of the deep jungle, made more intense by occasional bird twitterings. A brown human form is seen for an instant, but disappears. A tiny village appears, people all vanished for the moment, but the pigs remain rooting about among the refuse. You pass a line of ancient cannibal sacrificial stones, upright slabs set into the earth, and breathe strange scents. It is like being in a tunnel. At last there is a strange rumble, the pounding of the heavy sea, and soon the compound of the mission comes in view, and the resident's house,

At tashe French Marist Mission, where I stopped for a moment to talk with the Father, I learned that the French resident and his wife were down with fever, as was the Father hims elf to a slight extent. At the resident's house I was received by a fiery Corsican and an equally fiery wife, side by side in bed with fever. They were new, only two months here, and very likeable. Their small son was not sick but very pale.

Life here is a Continual battle with fever, without which these islands would be among the most tempting in all the Pacific. There are of the loveliest bays and inside passages that I have so anywhere. What a shame that the group did not escape the anywhere. What a shame that the donia and Fiji. As it is, curse, as did close-by New Caledonia and Fiji. As it is, New Hebrides mark the eastern and southern limit of the laria belt in the South Pacific.

We relied on a prophylactic dose of five grains of quinine daily to bring us through, for although the authorities differ on the subject, this seems the most accepted method. In addition, mosquito nets were installed and could be let down over the bunks.

The two Corsicans were convalescent enough to extend themselves in hospitality, but after partaking of some fine Médoc with them and receiving certain local information which I desired, the sun was so low that it was time to leave. There was the three-mile trail to cover before dark. No sooner had the sun gone down than the full moon took charge, and the rambling bay and our small toy lagoon were bathed in soft golden brilliance, and the cool night air came down from the mountains fresh with strange odours—suggestive of the unknown.

The next day we were awakened by a shrill whistle and the rumble of pounding metal. The La Perouse, the small island steamer, come to collect copra, had anchored at the very mouth of our tiny harbour announcing that she was ready to take cargo. Lancon, our friend from Vila, was aboard, and the little clipper ketch was his, waiting to take him to his plantation down the coast. The launch from the mission, the various planters' launches and cutters, and native canoes, came like bees to honey from all the arms of the big inlet, clustering along the black iron sides of the ship into whose maw the copra soon vanished. Planters gathered aboard ship to arrange for their shipment and gossip in the bar. One or two Australian vacationists marched around the deck, and a few French passengers sipped drinks at wicker tables

A hundred yards away was the edge of cannibal land. A mile or so away the bush guarded its dark secrets from these intruders.

On May 14th we left early for Bushman's Bay, a short sail along the coast, and arrived there at noon. The only sign

of life on this stretch of coast was Lancon's plantation, where the little ship now lay in a small break in the reef. The gale and high sea were over and it was perfect weather. We coasted along at six knots, a fine trade-wind in our mainsail and spinnaker. It was the first comfortable sailing we had had since within a hundred miles of the New Hebrides, and so we revelled in the relaxation of it. Deep in the big bay we anchored just off the mouth of a small inlet which we sounded presently in the canoe and found to be two fathoms to the very head. Therefore we moved Svaap in and anchored her with bow pointing out to sea (there was barely room to swing her) and a stern line ashore to a mango tree.

This was the home of the British Resident Agent for this part of the group, Charles Adams, a tall lean Britisher who with his charming wife extended every kindness possible

during our short stay.

The coco-nut radio operates to full perfection here, the drums being a good medium of communication, spreading news mysteriously with usual island rapidity. Mr. Adams had been informed by natives that an American canoe was coming long before we had arrived in Bushman's Bay. Any strange craft in the island groups of the Pacific is at once heralded as American, which speaks highly for the venture-some spirit of Americans.

There is constant tribal warfare inside, and cannibalism. The following description, which I quote from Erskine, held true in full until very recently, and in part

to-day:

'The people are inveterate cannibals. Enemies slain in war are eaten by them. They will go to other villages and exhume bodies that have been buried two, three, or more days, bring them home, cook and eat them. It is their custom,

when they wish to make peace, to kill one or more of their own people, and send the body to those with whom they have been fighting to eat. On the death of chiefs it is a frequent custom to kill one, two, three, or more men to make a feast for the mourners.'

They have found human flesh preferable to pork, and strangely enough the connoisseurs claim the flesh of the native to be superior to that of a white man which they say has a salty taste. There is in the Bishop Museum in Honolulu, a New Hebridean belt hung with 135 incisors, the tally of so many victims of its former owner—a chief, for the commoners were never so fortunate as to have so many opportunities to indulge in their unique appetites. It is worthy of note that the worst cannibals in the Pacific were also the most skilled workers, as is seen from the Maori and Marquesan carvings, Solomon Island canoes, New Hebridean mats and figures. When the Adams's house was being built, the carpenter was shocked one day when a leg was sent out to his workmen as a special gift.

The occasional salt-water native who can converse with the white man uses pidgin English, or bêche de mer, or Bechelamarre, as it is variously called — really a language all its own. Among themselves the confusion of Babel seems to rule, for each tribe, almost, has its own language, and even on much smaller islands than Malekula there may be

several mutually unintelligible tongues.

We left Bushman's Bay at dawn one morning after clearing the decks of the black layer of ash from the ever active volcano Ambrym; and with a favourable tide sailed along the coast past the little islands of Uri and Uripiv, past the two harbours of Port Stanley and Norsup Bay; and safely weathered the tide rips off Point Pinalum to glide between the mainland and beautiful Rano Island; and anchored

behind Wala in a tiny white sandy cove swarming with canoes and naked savages, all armed with guns.

This was the beginning of the most intensely interesting period of the whole voyage so far, in which we visited the small but densely populated little islands of Wala, Atchin, and Vao; entered the savage Big Nambass country from the north-west coast of Malekula; and explored the most primitive region of Espiritu Santo.

Wala, lying just off the big island Malekula, is the southernmost of three small islets which present in miniature the most complete picture obtainable of New Hebridean life, for here, concentrated in two or three square miles, one can see in a day or so what would require almost months of dangerous travel to find in the great main islands with hamlets scattered miles apart. There is no white man on Wala.

Finding just one native with a slight knowledge of beche de mer, I persuaded him, by the judicious use of tobacco, to act as guide, and thoroughly explored the little island. We investigated the several villages first, and then examined the five hamils, as the sacrifice and dance places are called. They were deep in the bush, a dim weird light filtering through from the great banyans and massed foliage that shut off the sky far overhead. Here were the huge carved figures, drums, stone altars, stone crypts, devil devils, and so on, and the ancient museums of treasured skulls and pig jaws and the sky. Here I was shown the abiding place of powerful spirits, and the stones where the sacrifices are made. These places are taboo to women — who would be killed if they were found there. We saw also the long gloomy men's club houses, up to 100 feet in length, with innumerable collections of cones, the interior of the roof being entirely concealed by the bundles which were suspended from the rafters. No objection was offered at any time to my thorough search throughout the island, but I had They were deep in the bush, a dim weird light filtering

to exercise constant care not to break any of the many taboos.

The next island — Atchin — provided quite a surprise, for we found there two white people: an American Seventh Day Adventist missionary and his wife, Mr. and Mrs. Parker. They are 60 and 62 years old and have been in the islands since 1898. They had just returned from long leave to find their substitute dying of blackwater fever, but they saved his life and sent him in a small boat to Santo where there is medical service. These people are wonderfully sincere, but fanatical in the extreme. Mrs. Parker has rather a bad case of elephantiasis which would be quickly arrested should she consent to return to a temperate climate, but their zeal for the work will not permit this. I listened to tales of attacks upon Mr. Parker's life, wars among his natives and with them, recent cannibalism, and so on. This little island is very little Christianized, and the larger proportion of its inhabitants remain heathen.

Mr. Joy, the British Commissioner in Vila, had told me of a native madman who was somewhere in this region. While in Atchin I learned that he had been captured and tied up in one of the villages, so Mr. Parker and I at once set out to investigate. Arriving there, we found a scene of great excitement, for just a minute or so before, the crazed man, very powerful in build, had escaped and run amok. He had set fire to six houses which still flamed and fell in ruins, stabbed his brother who was chief, shot at two men, and finally smashed a number of canoes and escaped to Malekula in another craft.

The villages and hamils of Atchin proved to be very much like those of Wala, but less elaborate. The Parkers were very kind and set upon the table surprisingly inviting vegetarian food, one dish in particular being new to me—the little furry green tendrils of the pumpkin vine, cooked after the manner of spinach. But although I was loath to leave, our time was soon up.

Late one afternoon as the sun was touching the blue mountains of Malekula, we anchored at Vao, the most savage of these little islands, just a few miles north of Atchin. Here there was one white man — a French Catholic père. He was down with malaria, shut in an airtight windowless room with the stove going to sweat out the fever. The door was opened a crack and I shut myself in with him for a time. There was not a hole to admit light or air and there was no lamp. It was as hot as seventeen hells and black as pitch. Although I did not see the stranger until the next morning I found him interesting to talk to. He had been twenty-one years in the group and five on Vao itself. I heard from him many stories of his life there — how the island was always in a state of turmoil, practically all heathen, and how he unofficially settled what disputes he could. He told me that there was a small war going on at present between rival tribes. He was sending to Adams for help, the messenger having left in a canoe just previous to our arrival. As the island is only a mile across, one can easily imagine what an interesting place it is in which to live.

Soon after dawn next day, we were surrounded by a cluster of canoes bearing the wildest looking savages we had yet seen. There were picturesque old grey-bearded cannibals with girl-wives, and young Apollos with too few pigs to own a wife. They are all quite hairy here, although the women remove it except from the head. The costume is the last word in originality and uniqueness in this part of the New Hebrides. The women wear either nothing at all or a narrow band around the waist and through the legs. The men have really a most unusual sheath attached by a string to the bark belt which they wear around the waist. There are two famous tribes on the mainland here, Little Nambass, and Big Nambass, or those of the small sheath and those of the large. These are probably the most savage natives in the whole Pacific Ocean.

All the men carried weapons, mostly twelve-gauge shotguns, which they have acquired from occasional traders and recruiters. Fortunately the cartridges are very old and often fail to explode. Many of the guns are in various stages of disintegration. I think it would be less dangerous to be shot at than to do the firing.

With this rather fearful looking group we started to trade. We soon found that we could buy anything they had with twelve-gauge shotgun shells. Tobacco, the usual Open Sesame, was of secondary interest, for they valued their guns

and ammunition above everything.

There was such confusion I could not keep track of everything. The deck soon became covered with baskets of fruit, vegetables and live stock, some of which I had bought and some of which was being offered for sale. More than once I started to pay a second time for an article, and each time the payment was declined. This honesty is the more remarkable when you consider what value they set upon ammunition, which was the money used. These people have not yet learned dishonesty in trade from contact with civilization.

Also, they could just as easily as not have made off with

their goods after receiving the payment.

It is altogether surprising that a solitary white man in a little boat, with one native as crew, can go safely among

savages who are still cannibals.

The prices that day were one cartridge for a basket of fruit or vegetables. A basket would weigh perhaps twenty pounds. For a cartridge one also could buy a small sucking pig, a 'Mary' pig as they are called, for all these negotiations are conducted in bêche de mer, that strange language which spreads over the Western Pacific. The male piglets cost more, for they are potential tusk pigs, and a fine tusk pig is a man's most valued possession in the New Hebrides.

They take the pig when he is young and remove the

upper tusks. Thus the lower ones can grow unimpeded, and eventually complete a perfect circle, or sometimes even two. With these pigs the men buy their wives. However, a very good tusk pig is considered more valuable than a woman.

These natives have a species of money which consists of finely ground shell fragments strung together. With about four yards of it a man can buy a good tusker, while two

yards will buy a wife.

I was amused to find that in Malekula, a larger island, the missionaries do not recognize this buying of wives with pigs. They passed a law that a good wife would cost five pounds sterling. Just where the natives were to get all that money I don't know, nor can I see that this raises the status of woman very much; in fact I would say that it lowers it, for to the savage a good pig has a certain definite value, whereas money is nothing more than certain useless bits of metal.

I chose a man to act as guide, and we went ashore in his canoe. A truce had been called for the day in honour of the occasion and we went through the various warring villages, and examined the hamils and men's common houses, which were very much like those of Wala. A war conference of the old men of the tribe was in progress at one hamil, and I very nearly precipitated a new, and what would have been a slightly one-sided, conflict by taking out my camera. No objection had been made to it heretofore, but now the men all leaped to their feet and started forward. I hastily put the thing away. My guide spoke to them. They settled back on their haunches and glared. You walk a narrow path with these people, safe enough until you break one of their numerous taboos. Members of the younger generation may overlook your false step but not the older ones. You can read your danger in their eyes.

This taboo system which one meets with throughout the Pacific is an amazing thing.

'The early voyagers found almost everywhere on the islands they touched a system of which the name has become a common English word. They recognized it as the method of prohibition against which they were constantly striking, but to the present day no one has fully treated of the wonderful political and religious engine by which the Polynesian first, the Melanesian in imitation, controlled the wishes and acts of the common people. It was a mighty power in the hands of the ruler, whether priest or chief, and it might be exemplified in the strip of white kapa that, bound around a coco-nut tree preserved the fruit from all marauders, or the tuft of the same fragile material at the end of a slender wand which placed in the path would turn an army aside into the jungle. It might be temporary, as the order of silence which at stated times fell on the island and not even a dog might bark or a cock crow while the taboo lasted, or it might be the lasting prohibition which denied to woman certain choice articles of food which man was free to eat.

'The origin of taboo is unknown, but it must have been remote, so elaborate had the system, become. It had grown until it became so complicated that the understanding of the common people could not compass it, and even to the chiefs its restrictions grew unbearable.'

My chances of getting into Big Nambass country looked slim. Without a trusted guide it could not be done, I was told. But I had never let these things discourage me—so off we sailed to the most promising section of coast near this district. Something within me said that adventure lay ahead.

Having spent two years among the primitives of the South Pacific, I am continually being asked whether there is still any cannibalism. I searched long and diligently throughout the Society Islands and found the natives eating nothing more romantic than tinned beef. In Atiu, of the Cook Group, I learned that the last feast had been one hundred years ago, when the entire population of a neighbouring island had gone into the pot. Fiji — that old centre of cannibalism — had more recent feasts to tell of. But nowhere could I actually meet and shake hands with a living, black, naked cannibal. That was before I came to the New Hebrides.

These islands, about eighty in number, are inhabited by Melanesians. Quiros discovered the group in 1606, thinking he had found the long-sought southern continent of Australia. Somehow they have remained the most primitive of all the South Sea Islands. Less is known about them than any other group. Their inhabitants are countless warring tribes speaking various languages unintelligible in other localities. Many of these tribes are cannibals to-day, but their extent and number are unknown to the Government. Bush tribes are warring among themselves and with the coastal people. They appear to me to be thriving. They have not yet been attacked by the depopulating effect of the white man's diseases, or by the debilitating effect of having his totally unsuited religion and code of morals thrust upon them.

The work has begun, of course, but it has not as yet

progressed very far.

But as to the cannibalism... Is it promiscuous? Do they depend upon human flesh as a major item of their diet? Is it that which gives the men their strong bodies and their complete superiority over the women?

The answer is: No. Then where does the cannibalism come

in? It is more often than not in connection with a ritual or ceremonial occasion. And if the body of a powerful enemy falls into the hands of a tribe it is only natural that they partake of some of the parts to absorb the valorous qualities of the fallen hero.

Anchoring for a few days in a bay on the north-west end of Malekula, near the Big Nambass country — probably the most savage region of the New Hebrides — we made friends, mainly through overtures in the form of gifts, with a tribe we found living almost an hour's march inland. One tribesman had picked up a few words of 'pidgin' somewhere, and became my particular shadow and interpreter. I learned that a large war party had gone out from the jungle village a couple of days before. And when, late that afternoon, great drums started beating in a weird intoxicating tempo, I knew that the warriors were returning.

A quarter of an hour later an ageing, grey-haired, but powerfully built warrior brushed aside some vines that partially hid the beginning of a trail leading to the jungle. After him, in single file, came a silent, serious band. The drums ceased their throbbing and hardly a word was spoken. One man was badly wounded in the side, just above the hip. Several of the people started to administer to him in silence. His face was impassive. Another of the returned party carried two guns instead of one. A feeble old man, covered from head to foot with scars and skin disease, touched the second gun with a look of inquiry. Its bearer handed him the weapon and muttered one low guttural word in reply. The old man nodded and went off to resume his seat by the fire. He said nothing. His son had owned the gun but now had no further use for it. The expedition had failed. Their enemies had been warned and were in waiting. The party had been lucky to escape with only one killed and one wounded.

The head men squatted about the fire on their haunches

- a stoic, glum-looking lot. There was much talk. I sat on the outside watching, my friend explaining now and then in a few words of pidgin. The women were cooking a meal which ended the parley after an hour or so. I ate a few mouthfuls to be polite.

The meal finished, the younger men went a short distance out along all the numerous trails and began cutting trees and brush. They worked hard and soon had the paths all

pretty thoroughly blocked.

A raid is usually made as the day is dawning. The warriors creep upon the sleeping village, wait for dawn, and make a rush. They rely upon the surprise of a swift blow and an immediate retreat for success. With the roads blocked this retreat is hindered and the villagers, knowing their own bush intimately, can reply to the attack with a vengeance. They proposed that I stay as their ally.

'Gun belong white master, he strong fella; maybe he stop shoot along Big Nambass,' my interpreter said.

This did not appeal to me and I returned with my guide to the sea and Svaap. But next day we again entered the bush. As we followed the almost subterranean trail, a gloomy, dank, slippery tunnel through great banyans, mangoes, lianas, and vines, we heard the penetrating throb of the drums, great hollowed logs, carrying a triumphant message.

We found the village greatly excited. As expected, there had been an attack, but the enemy had been repulsed with-

out a single casualty to the defenders.

I finished my bartering for several implements and was ready to go. But it was time for the midday meal, so once again I squatted with them. You take your food from a big common wooden bowl with all the rest. They suck their fingers and reach in for more. The food is burnt, and all in all it is an unappetizing thing to say the least. But you have to do it, for with these people you must make no

188

wrong move. So I did my bit and, forcing a smile, patted my stomach in the universal sign that it was a grand feast. My interpreter friend grinned too, and rubbed his.

'Him one fella Big Nambass,' he said, pointing first in the general direction of the enemy tribe, and then at the bowl of food before us. 'We fella kill 'im dead finish long time sun he come up.'

I think that even my forced grin vanished at that moment for suddenly I felt as one feels just previous to being very sea-sick.

What did it taste like? you ask. Like veal, as one of our well-known African explorers has stated? Or even like pork, which another has had the temerity to claim?

If you'd like me to be absolutely truthful — which I know you don't, for it is so awfully prosaic — I'd have to answer that the darn meat was so burnt and covered with ashes that it could have been almost anything. So if you must know what it tastes like to be a cannibal you will have to go there yourself.

CHAPTER XIII

For four days we sailed without sighting land after leaving the primitive New Hebrides and covered 400 miles with continually shifting breezes, squalls and calms. The live stock—chickens and a pair of very small sucking pigs—which we had acquired by barter from the natives of Santo, gradually diminished and we lived high. After the first day the sky was constantly overcast and we ran on dead reckoning only, wondering what the currents were doing with us. Then, on the morning of Saturday, May 24th, the sun shone forth and gave us a position line that ran bang through the middle of Santa Anna, our destination.

So we altered course and followed the line, and at eleven o'clock that morning we saw the twin islands dim on the horizon ahead and simultaneously the wind drew around so that instead of running off with spinnaker set we were beating to windward. We made the little outposts of the mighty Solomons that night, however, and anchored in the lagoon of Owa Raha (Santa Anna) just after a gorgeous sunset on Bauro's massive mountains across the burnished gold strait. We had no chart of the island, so followed the reef looking for a pass. It was a wide and deep one, letting into a spacious lagoon, deep to the very beach, where we found about five fathoms near shore. A native village hid among the palms and canoes lay drawn up on the sand. Two or three came alongside filled with very pleasant, handsome natives, quite Polynesian in appearance instead of black as we had expected.

The natives were quite loaded with ornaments, armlets of thick solid white shell worn above the elbow, nose rings and pins, fantastic combs in their hair, and necklaces of

various sorts made with shell, tusks, teeth, tortoise shell, seeds and so on. The great variety of materials used in personal decoration surprised me. The scanty costumes were of plaited coco-nut fibre, leaves and grasses, and cockatoo and parrot feathers.

The canoes were entirely different from anything I had seen, with both ends arching high above the paddlers' heads in a graceful curve. Throughout the South Seas we had seen dugout outrigger canoes. These had no outriggers, nor were they dugouts. They were made of thin planks ingeniously fastened with vines and sennet, light, flexible, and fast. At each extremity the craft were ornamented with shells or tassels and inlaid with mother of pearl. The frames and thwarts were beautifully carved, and great pains had been taken in the construction. The paddles were short, narrow, with a pointed blade that served equally well as a spear.

That night we had an exciting moment in the black of a heavy rain and wind squall from the land. There had been rain all night but no wind to speak of. We slept securely. Suddenly something awakened both of us and we heard a strange rumble close at hand. The reef muttered under our very stern and our anchor chain hung straight down. The Kermath started on the second turn and we moved away from the threatening white line. By instinct we ran across the bay to where we had been and anchored once more. The anchor must have fallen the first time just on the edge of the shoal water and slipped down into more than fifteen fathoms so that we had slowly drifted across toward the barrier reef.

We left the next day at noon, after going ashore and exploring a bit and bartering with the natives for food and curios. This was the signal for a squall which effectively blotted all land from sight. When night came on we were following the coast of Bauro intending to pass between it

and Ugi Island later on. But by seven o'clock storm clouds had blackened the sky and a steady rain fell. We could not even distinguish the mountains of Bauro which towered on our left and we knew that if it did not clear very soon we could never find the pass.

At 7.30 we gave up and put to sea for the night in a dangerous position, trapped in a narrow strait only four miles wide, hemmed in by the great island of Bauro on one side and the rambling Three Sisters and Ugi on the other. At 9.30 when we had been hove-to for two hours, a heavy squall drew the wind around to east—the worst it could have done—and there it settled and rapidly assumed gale force, piling up seas so large we seemed in a deep black pit. Our position was soon a matter of conjecture, for there were strong currents in the straits.

The next day we anchored in an exhausted state in Selwyn Bay, Ugi Island, after a tussle with heavy tide rips off the point of the island. We came driving in before the gale like a bird seeking shelter from the storm, this being the nearest anchorage in which to recuperate from our twenty-four hour battle with the elements, unknown currents, and greedy reefs. Never have I spent such a miserable night. A vicious easterly gale drove a cold, stinging rain in such quantities that the scuppers spouted streams clear of the hulls like hoses. All our senses, strained to the utmost, could give us no help. To leeward we could not see beyond the side of the boat, so dense was the black and the rain, while to windward we could not even look, for our eyes were driven shut. The roar of wind and rain and confused seas precluded any chance of hearing surf before we were in it.

By instinct we pounded back and forth in our narrow prison, trying to keep in the wider portion opposite the Three Sisters, yet fearing that the doubtful current was taking us down upon the still more dangerous portion hemmed in by Ugi. New ropes were brought out to reinforce the old jib and mizzen sheets. Everything was soaked.

Oilskins were useless in the tropics for the heat and humidity glued them into a hopeless mass. Perhaps there may exist some pure rubber garment in the form of a cape with a leakproof collar, but if so, I have not yet found it. A tropical rain drives through all the openings of an ordinary rubber coat so that it is almost useless.

The night dragged on, every hour an eternity. A gulp of burning raw whisky now and then kept us going. Sometimes an instinct would suddenly grip me and without knowing why or how, I would sense that we were close to the land and so we would pick our wave, taking the time from the clock below, and get on the other tack. It may be that the abrupt bluffs of Bauro affected the sound waves in some manner, thus explaining the seemingly inexplicable instinct. Etera, without the added responsibility to buoy him up, fell exhausted on his bunk and lay in a mumbling sleep. Dawn should have come at 5.30 a.m. At six I could see nothing, for it was as black as ever. At length it faded imperceptibly and by seven one could see, and then, feeling like a man released from the death cell, I let her go for the Bauro shore, which loomed through the rain. A few hours and we made the protection of little Ugi, beat in through tremendous gusts from over the gulleys to an anchorage in white sand, five fathoms, and let out thirty fathoms of chain to make sure, and slept.

What a reception we had in these isles of gloom! Nearly on the reef the first night through a deceptive anchorage. Caught by a gale in what should have been a quick, safe, fair weather passage, following the bluff shores of Bauro. What a climate — howling wind and rain in what should be the fine season here! The bad season should have ended several weeks before. It was nearly the first of June, yet

here we were in the midst of the worst weather we had

experienced in a year.

We were weather-bound in Ugi but did not mind as it was a pretty little island of white beaches and low hills and valleys. On the beach the pleasant, native-type, flowerhidden home of a white man sheltered beneath great trees. Three or four native houses were near by for his handful of workers. On the hill stood a building of such magnificence that we recognized it at once as a mission house. It turned out to be a missionary school and made as much commotion as a three-ring circus, with bugles blowing every few minutes, drums beating, and so on. At five the next morning it started again, evidently for the first church service. It is hard to understand why the poor natives of the South Seas have to be made to get up at 4.30 in the morning to go to church, and to go two or three times a day and four or five on Sunday, or Saturday if you happen to be a Seventh Day Adventist, when the same religions practise perhaps a weekly service at home.

The mission school here was largely for the purpose of preparing native teachers to carry the gospel among the islands. We found that the well-kept plantation on the beach belonged to the mission, and the little house, hidden in flowers, to be that of the manager, H. L. Freshwater, and his wife. Mr. Freshwater, although originally from England, had been twenty years in the islands and gave me some valuable information. I also learned that we had just missed meeting the Government district officer who had been here two days previously by boat to collect taxes and settle disputes. Imagine recent cannibals paying a ten-shilling gun tax, a two-shilling dog tax (although the village pighunting dogs go free) and a guinea poll-tax. Just where the poll-tax fits in with natives that have no rights, but merely a protectorate they don't want, I cannot see, but many things are strange in this land.

Although the Ugi people were formerly noted for their material culture, for their amazingly elaborate council buildings and canoe houses, with their beautifully carved and coloured tie-beams and posts, and for their remarkable carved figures and household articles, they have come to be so completely under mission control that they are now quite uninteresting and lazy.

On the second day at three in the morning we sailed from Ugi - for the weather seemed to have cleared and we were anxious to make Tulagi, the capital, and officially enter the group. During the day the wind shifted and became full trade force so that we set the spinnaker and made great time. There were light showers, but soon the sun burned them off and our spell of bad weather seemed over. Malaita loomed far in the distance, those of its hundred miles of length that were visible, grey-blue and capped in white. Ugi, our erstwhile haven, was soon below the horizon and Bauro began to shrink. Ahead, Guadalcanal showed faint now and then as the invisible mist thinned a bit. The sea was sapphire, and tumbling snowy crests chased each other along. Our bow wave curled wider and wider as we quickened speed and our ever-present trolling line was wire taut. How quickly one forgets the fatigue and discomfort and even despair when the day turns out like this. It seemed impossible now that forty-eight hours ago we were mentally and physically exhausted from a heart-breaking night's battle.

Our joy was all too short, for late in the afternoon the breeze ceased for the day and we had to start the engine to try to make Marau Sound for the night. It lay about ten miles ahead and Guadalcanal just beyond, both black and dirty-looking in a resumption of the bad weather. The current had been holding us back more than a knot all day, but now it increased in strength until we hardly moved. At 6 p.m. catastrophe came in the form of a terrific squall,

blowing the spinnaker to pieces. So to sea for the night again, for although we were at the very entrance of the Sound, the black squall closed the door as effectively as steel bars. This squall was not unexpected, but we had taken a chance and tried to utilize it to turn the scales in our favour so that we could make the anchorage for the night. Therefore we hung on to full mainsail and spinnaker and ploughed along wildly, past the little reef islets where the surf boomed, with only a couple of miles to go; when suddenly black hell was let loose in a sudden shift to northward. Confusion reigned for a time, while we got in the remains of the sail and the boom. Then with jib and jigger only we beat off what was now a lee shore in a sea that the Gulf Stream would have to go some to equal. The night was a repetition of that one two days before, so the less said the better, except that we attempted to stay close to Guadalcanal for a start at dawn for Tulagi. But there was no such luck, and dawn's reluctant light and accompanying calm found us a couple of miles from the coast of Malaita, the current

having set us more than twenty miles back in the night.

It took all day under power, over a mirror surface that reflected heat from the most intense sun I have ever seen. with sweat pouring from us in streams, to get back against the current to where we had been the night before and to find an anchorage. We got out our reserve petrol, the drum that came all the way from Panama, and dumped it in our nearly empty tank. Only when we had worked in behind the little outlying islets did the current abate and allow us to make progress. Then the engine pump got temporarily plugged through sucking in debris and we had visions of being back on Malaita again. But it was soon going and we discovered a little uncharted bay behind a break in the reef and found a small native village which they told us was called Poposa. Two streams flowed into our bay, the shores of which seemed to be entirely composed of coral fragments. The coco-nut trees were backed by dense bush and a little farther in a high range of hills rose into the clouds.

The natives, except for a few that came out in canoes, were for the most part invisible, but as we had no reason to fear this district we at once embarked in the canoe to bathe in the nearest stream.

Later we explored the village, meeting various aged cannibals and a bêche de mer-speaking younger generation. The women wore the six inch grass skirt à la Malekula in most cases, although some were perfectly naked. The men wore a few ornaments and partially covered themselves with a loin covering. Many of them had the scaly condition of the skin that one finds widespread in the islands, fragments peeling off everywhere as from a bad sunburn. I bought what I think is a rare thing, a really old cannibal spear of ebony, tipped with a human shin-bone that was carved into many points and intricate scroll-work. It was said to be poisoned and was very carefully handled by the men. I also obtained the shield. The price was two packages of tobacco, plus an old straw hat and a half a pareu from Tahiti — surely a good bargain. Later we bartered aboard ship for supplies: a fine big fish, a cock, and coco-nuts. The chicken and the fish were bought with tobacco and the nuts cost three fish-hooks for a half-dozen.

We were now close to Tulagi and hoped with a bit of luck on the morrow to at last bring this ill-fortuned leg of the voyage to a close. The Solomons more than live up to their name. They are about as bad a place for a small yacht as could be found. The currents are terrible. Night navigation is folly. The weather is awful — with almost unbearable heat and torrential rain. You freeze one minute while weathering a howling purple-black squall and perspire a pool about your feet the next.

We were off at six in the morning for Tulagi, keeping

only a few yards from the beach most of the time to escape the current, under power and sail. Thus we followed the points and bays of Guadalcanal and passed the Rua Sura Islands. There is a wide region of shoal and reefs between Guadalcanal and Tulagi. To save time we cut straight across and conned the ship through. Soon we threaded our way between the Sealark reefs into the channel. The petrol was just about finished as it grew late and the breeze dropped. After passing the missionary headquarters on the island, prosperous and well kept as usual, we ran out of petrol at sunset just behind Bungana Island, with only about six miles more to do and not enough breeze to do it. So there was only one thing left to do—and much to my surprise the little engine ran quite well on the kerosene we poured into it.

Across the wide bay we chugged, into the little group of islets that protect Tulagi. Soon it was dark. The range lights were not to be found. We entered by the compass. Then the engine coughed on the last of the kerosene, so we emptied the lights and got enough to carry on a bit, feeding it directly into the carburettor from a bottle. We ran out of the last drops of fuel just in the harbour entrance, close to shore. The tide started to take us out, but we heard voices on land. A shouted conversation ensued in the dark and we put the canoe in the water so that I could go ashore. There I found that I had been talking with a Mr. Fife, who produced some petrol from somewhere, and soon we were at anchor, just beyond the *Renande*, the Solomon Island Government yacht.

The next morning after giving us pratique, the pleasant Dr. Steenson solved my usual haircut and bath problem by taking me with him to the hospital where he administered the former rite himself, and placed a well-fitted bathroom at my disposal for the duration of my stay. Incidentally, I made almost daily visits to the hospital for another reason,

Sallakana sidiace od nistr.

for a scratch on my ankle had developed into a small tropical ulcer. In the tropics generally, but much more so in the Solomons, any small abrasion of the skin is very apt to develop into one of these sores despite all care. The ordinary antiseptics seem to have no effect. Iodine and similar preparations seem unable to prevent infection even though used at once. Each medical authority that you meet down there has his own pet method of prevention and cure of these sores. No two agree. In fact, I have heard doctors in more temperate climates deny the existence of the things which Jack London called 'Solomon Island sores', and which proved so disastrous during his voyage in the Snark in these waters.

The particular treatment in vogue here was Eusol and hot dressings. The assistant to the doctor, who prepared my dressings each morning, was a former cannibal, a tattooed loin-clothed individual with a great bush of hair. He had been convicted of murder but now worked in the hospital under a commuted sentence. After ten days or so of hospital treatment, during which time the ankle became worse rather than better, and particularly after the Scotch-Chinese half-caste doctor in charge (not the Dr. Steenson before-mentioned) injected seven lepers with Chaulmoogra immediately before doing my dressing, I decided to rely once more upon my own treatment—for even I am privileged to have my own theory on the subject—and strangely enough had cleaned the thing up within a week by the use of pure alcohol and a preparation supplied me by Dr. Noel in Tahiti.

Tulagi is a pretty spot located on a small island just off Florida Island. On the harbour side are the official buildings and residences, while a short walk along the shore brings one to Chinatown, a picturesque settlement with its Kuo Min Tang club-house, its close-packed Chinese stores filled with native trade goods, and its water-front teeming with curious craft and graceful native canoes. Convict labour has carved a deep cut through the abrupt impassable cliff behind Tulagi so that one can stroll to the other side on a level path between solid walls of rock. There one finds the attractive hospital buildings and grounds, and the golf club.

ひがし んしくせき チンコ りゅいり 1月5月1月1日に

Speaking of Jack London, I believe it was he who described Tulagi as the place where they drink between drinks. This was a very fortunate description and couldn't be improved upon. Due to the prevailing rites of hospitality in Tulagi the most difficult feat for the visiting stranger is to remain sober for any considerable time. Even when dining at the hotel it was impossible to escape, for such an unheard error as drinking water with your meals was at once forestalled by the simple expedient of filling the only available glass with beer. However, the human constitution can survive much, and after all—life is short.

In another field also does Tulagi hold the banner. This is in the exorbitant price of commodities. In the Solomons one reaches the highest level to be found in the Pacific, for it is at the maximum distance from the source of supply. The motorist or power-boat man in America who complains when petrol goes higher than twelve or fourteen cents may find consolation in learning that in these islands it is in the vicinity of seventy-five cents. Even at this astounding price the dealers here actually make hardly any profit on it, for I have been shown cost sheets, and since freights and duty cannot conceivably account for the vast difference in prices it is undoubtedly our American Oil Companies who are responsible.

Thursday, June 12th. — Departure from Tulagi for Savo Island, where the little Megapode birds lay eggs nearly as big as themselves and bury them in holes five to ten feet

deep. This is the main reason for stopping at Savo, for we will get a supply of eggs which are very good to eat and twice as big as hens' eggs. The young birds come back to the home to lay their eggs, so the natives each stake off a part of the area and reap a part of the crop but take care to leave sufficient to insure continuation of the supply. They do not want to kill their goose of the golden eggs.

Strong SE. 'trade' and moderate sea. This is just a short jump, only twenty-five miles, the first before taking final departure for Papua. Coasted the weather side of Savo, then anchored at 11.45 a.m. off a small native village of a dozen huts. They seem to build a better type of house here, but have few canoes.

This is a volcanic isle but densely wooded to the very tops of the hills. It is only three to four miles in diameter, with a great crater and several lava flows to the sea. We are anchored on top of a former village which subsided in an earthquake a few years ago. One could find numerous anchorages all around this island, depending upon the wind.

6 p.m. — Returned from afternoon ashore. Took my gun and went after pigeons. Guided by half a dozen natives I entered the jungle. There is no other word to describe the bush here. There are giant butterflies with ten inch wingspread, parrots everywhere, exotic flowers and scents, monster trees, vines, bamboos as straight as a rod and tremendously high. The pigeons take to high trees and the natives frantically point them out straight overhead. You nearly break your neck trying to sight them but can't. At last you see one directly above the spot where you stand, so high that he is nearly out of range, and you go through various contortions to get a bead on him and fire. At the shot the tree seems alive with pigeons, and they fly from all parts of it, while you would have sworn a moment ago that there was not a single one there. The one you hit tumbles endlessly down and finally lodges in a crotch too high to

G*

get at and you have to leave him there. The birds now take to still higher trees and although the natives point them out in plenty you cannot reach them with a twelve-gauge shotgun, and vow that next time you will come with a rifle. So you find it more productive of food to go back to the village with your cartridges and barter for fowls. You buy a young cock for one shell, and one 'woman' for the same price. This is as good as the best marksman could do with the same shells, and decidedly simpler.

The Solomon boys here seemed anxious to help us, and the atmosphere was more than usually friendly. There is no white man here. We saw quite an elaborate tomb for some 'big master' and a smaller one near by. Also the village boasted the usual ceremonial canoe, a huge one elaborately decorated with shells and carving. The houses had more of the basket-weave construction than I had heretofore seen. We bought about four to five dozen megapode eggs, big long heavy things, brownish in colour, for a small quantity of tobacco.

They are all betel-nut chewers here, with scarlet mouths and tongues and dark teeth, and they are constantly dipping their lime sticks into their lime gourds and sucking them. Then occasionally they flavour the mess with a green leaf which they chew with it.

It is blowing hard to-night but in the right direction.

Friday, June 13th. — We awoke at just midnight; there was a bright moon and a nice easterly breeze, so we hove anchor, got sail on her and set a course for our next port, somewhere in the Russel or Pavuvu group. I at once put the spinnaker on her and turned in, leaving Etera to do the first watch. He did well, averaging better than five knots, but when I took her the wind died, a light but persistent rain started, and we barely moved except to buck about in a rotten sea until 10.30 a.m. when the breeze came in strong again. At noon we passed close to the first small

around the point to the bays and lagoons to the west, into a small cut that opened into a brackish lake. I had my rifle along but unfortunately we saw no alligators. Lunched ashore and soon after went aboard to get ready for leaving with generous contributions of fruit, scones and a jar of grape-fruit jelly. They have grape-fruit here and are of the curious opinion often found in foreign countries that Americans live largely on grape-fruit, nuts, and chewing gum. They have also a species of grape-fruit too sour to eat, with a skin an inch thick and the size of a football.

3 p.m. — Departure for Gatukai Island of the New Georgia group. We are making our exit from this maze of islands, peninsulas and lagoons, and will now lay a course for what will be our last stop in the Solomons, sixty miles to the west. Light breeze on our port quarter, mainsail to

starboard, spinnaker to port.

Monday, June 16th. — There was the usual good breeze the first part of the night, followed by the usual squalls and calm of the early morning hours. Dawn found us close to the outlying sentinels of Gatukai, Mbulo and tiny Kicha Island, the latter sacred and forbidden to women by the Gatukai natives who bury their dead there and also keep altars for the spirits inhabiting the place. Soon we rolled and plunged past the weather point of Gatukai in a heavy tide rip, and watched the great rollers pile up and thunder on the close lying reef.

We found a pass into a completely land-locked lagoon. It was a beautiful spot. There was barely enough water to a couple of feet under the keel, but once inside or and we could pick our way slowly across a to an anchorage off a little native village with river. From here we could have travelled for days steeted lagoon waters of the New Georgia group going outside, for the main islands are fenced barrier reef that has grown up into small

connected islets, thus forming a great inland waterway system.

Distance sixty-four miles, Somata Plantation to this anchorage.

An ancient grey-haired and bearded old warrior at once, came out in a canoe, his cut ears hanging in great dewlaps to his shoulders. He spoke very poor pidgin that even Etera could get little out of him in the way of information; so I do not know the name of the place as yet.

Later. - This is a Seventh Day Adventist mission village, called Penjakoo by the natives. They have no missionary here now. Of all the religions in the South Seas this is probably the most amazing. From conversation with the natives I find that they are not allowed to eat pork, and as village pigs supply practically the only fresh meat in islands of this sort, this important element of their diet is eliminated. Dr. Lambert writes: 'Pacific Islands with plenty of pigs have the most enterprising and most disease-resisting population.' But more important still is the question of fish. The sea provides the biggest item of all outside of the various vegetables in the diet of the native. Fish, as everyone knows, have scales. But there are also a few fish without scales. Now, through the medium of the Seventh Day missionaries, God has decreed that the native may eat fish without scales but to eat fish with scales would bring His wrath down upon them in dire vengeance. It is also tambu (forbidden) to eat tortoise, which abounds. With a diet so limited to start with, the elimination of these essential items seems to me to be almost criminal. Tobacco, of course, is also forbidden, and one who has seen the invariable craving of all natives for this consolation, would believe it impossible to take it away from them, if he did not understand the means used and the psychology of the native. The basis of the old social organization of almost all South Sea natives was a tabu or tambu system run by the chiefs or medicine men.

Thus the native takes inherently to tambus, the missionary merely going the old medicine man one better. And the people at home would undoubtedly be surprised and inclined to discredit the fact if told that practically all missions in the South Seas preach a very material hell, preying upon the converts', fear of a horrible after-life to accomplish their ends! It is a case of replacing the older indigenous form of sorcery with a modernized Christian sorcery.

Tuesday, June 17th. — We have decided to take advantage

Tuesday, June 17th. — We have decided to take advantage of this perfect anchorage and do some painting, for the boat is as steady as if she were on the ways. Etera went aloft with a brush and a can of rigging paint to start on the wire work, while I worked on deck.

The black natives go about their business, not paying much attention to the strange craft, and the canoes are constantly passing. The people wear practically no ornaments, which is unusual in the Solomons, but all have the greatly distended ear-lobes. They do not chew betel. Customs change like this as we progress from island to

island. The native tongues differ accordingly.

Wednesday, June 18th. — Finished all rigging and deck painting, and later the topsides. The weather has changed; it did not rain last night for the first time for days, nor to-day — so the painting was successful.

Thursday, June 19th. — We are staying one more day to allow the paint to set, and to explore a bit. Then we push off for New Guinea waters. I will say this for the Seventh Dayers, that Penjakoo is the cleanest and best kept native village I have seen in the group, with Santa Anna second. The houses are thatch, well built and with particularly high peaks. The ground is all planted with an even growth of clover, soft and cool and springy to the foot. The church is thatch, has turret-like windows, well worn benches, a plain altar and two kerosene lamps. The houses are different inside from all I have seen, being as near an approach as

could be managed to a white man's house, with platforms like beds, rude chairs, dressers, and even a few pictures and ornaments on the walls. There were several small hand-sewing machines. When the people want to sit down they do not utilize the chairs but sit upon the floor, or upon the ground outside. And when they want to comb their hair they take the mirror and put it on the ground.

The big canoe house contains an assortment of craft ranging from the little one- or two-man size to the great fifty footer. The men wear merely the sulu or loincloth, but the women all affect a loosely fitting Mother Hubbard. I saw no tattooing, plenty of the scaly skin disease, but no yaws or elephantiasis. They sing remarkably well, the morning and evening services being a beautiful example of natural-born harmony. The women carry loads upon their heads, and show the resulting grace.

I returned at sunset and shortly afterward there came the old-timer who had welcomed us, with a string of fish that he wanted to sell. This aroused my curiosity as I knew that they had not enough to go round ashore. His price was high, for he wanted kerosene in exchange. I had an idea and went to look at the fish. They had scales and were of no use to him — tambu. That was why he was so anxious to sell them.

For the second night now we have had sunsets that defy description. I give up all else that I may be doing and simply sit and look and experience that oft-felt sensation of futility, for if only one could grasp such beauty and keep it intact for the future—perhaps to show to one's dearest friend some day—how wonderful it would be!

Friday, June 20th. — Departure for the Laughlan Islands, nearly 300 miles distant. We are leaving the Solomons for good now, and although they have occasionally smiled upon us, they have more often scowled and glowered, and so, as we leave them they bid farewell with their usual gloomy,

sullen aspect, cloud-banked, with black rain squalls in the mountains.

Saturday, June 21st. — It was a good night. The breeze held throughout and there was no rain for a wonder. To-day dawned clear and the breeze lightened so that we are only making three knots.

Noon — Made 115 miles since departure, but we are considerably to the south of our course. I had expected a northerly set and kept well south in accordance, but evidently the set is southerly just now.

This is the shortest day in the year here, and to-morrow the days will start to lengthen as the sun moves south again. At home, on the other side of the world and in the other hemisphere, they will watch the days get shorter and the long summer evenings gradually decrease.

4 p.m. — Average three knots up to 2.30 p.m. when a squall arrived with considerable rain and wind enough for six knots, which we are still doing.

5 p.m. — Practically calm with the slop left over from the squall. It seems there is no such thing as settled weather in this part of the world, unless it be settled unsettled weather. Each squall sends us tearing along; we grow momentarily hopeful of running off the remaining 150 miles in twenty-four hours and anchoring to-morrow evening at Laughlan — only to be wondering an hour later if we can do it in three days.

At 6.45 p.m.— I caught another bird out of the air, this time a pretty little grey tern who made quite a disturbance for a few minutes. When I put him on deck he could not take off by himself but had to be tossed into the air before he could leave. This is the way with all of these sea birds—put them on the deck of a ship and they cannot fly off. They must start from a high rock, a tree, or the water. We ate a booby the other night, but he was rather fishy in flavour, although quite edible.

Sunday, June 22nd — Noon. — We have sixty miles to go, SW. by W., the current having set us way to the north during the night. We carried a good steady breeze through the night with no rain. It seems the farther we get from the Solomons the better the weather is.

This is our last night on the Pacific Ocean I hope, for to-morrow, fate willing, we make our first land beyond the Pacific, the Laughlan Islands, an atoll of horseshoe shape open to the west, with seven small islets on the reef, only nine feet above the sea. Its greatest diameter is less than four miles and most of that is reef. Not an easy landfall.

And so we are entering a new world — the lands west of the Pacific! For twenty-one months the South Pacific had been our home as we found a leisurely way among its dream islands or drove our graceful white bow ever westward across its wider stretches. Weeks on end of beautiful 'trades', periods of squalls and doldrums, days of sultry sweltering heat, when the atmosphere danced before the eyes in shimmering intangible waves and coral atolls hung suspended in the sky in mirage, now and then a gale and once a hurricane; everything the great ocean had to offer we had sampled.

Now this was ended. Behind us the vast Pacific stretched away eight thousand miles to the coast of South America. Ahead lay a new world, a last month or so of the primitive,

and then the East: Bali, Java, Singapore, India.

If you take your atlas in hand and open to New Guinea you will find a great number of small islands and reefs extending east of the main island. They are populated by Massims, or Eastern Papuo-Melanesians. They have a very strong Polynesian influence which decidedly affects their physique and culture. Although under the Papuan Government, they have practically been left alone and can still be found in their original state.

We made our landfall on a little cluster of these islands June 23rd, 1930. They were the Laughlan Islands. We found an atoll identical in appearance with those of the Paumotus: little green waving islets strung along a curving reef where the sea burst in blow holes and caves like a heavy shell exploding in the sea, throwing great fans of white water high as the palms.

Villages appeared. Crowds of natives lined the beaches to watch our approach. A can've shot out, a pandanus sail went

up and she glided swiftly out to sea and caught us. The two men in her were beautifully built, and of light copper colour. We had expected black skins. The Polynesian influence counted for this surprise. Their hair was high and bushy like a Fijian's, but finer and softly curling. They wore a neat pubic leaf and bark belt around their waist, tight bark bands on the upper arms with flowers sticking out of them, necklaces of tiny cut shells and teeth around their necks, and ornaments hanging from their cut earlobes. They were shouting one word over and over again as they came alongside:

'Tobacco! Tobacco!' they cried, and extended pleading

Soon we were surrounded by a fleet of these canoes, all raising the common war-cry for tobacco. Some asked for betel nut. They were very crestfallen to find that we had very little tobacco to trade with them. The natives everywhere in the South Seas expect any ship to be a trader, and were always very much puzzled about Svaap. Finding that we had nothing to sell or trade they would assume us to be recruiters. When this theory failed they would be at a total loss. This is very natural, of course, for their only contact with the mysterious outside world is through traders and recruiters.

We stayed two days to make friends with these people and investigate their lives, and found that although they were quite Polynesian in many respects they had not that sense of hospitality and of giving which prevails in Polynesia. Not one of those to whom we gave tobacco brought out coco-nuts or any of the usual return gifts. They did bring out a few nuts and very poor mats, but carried them all off again when we did not produce more supplies of tobacco. We found these people, and their neighbours to the west, to be simply insane for the flavour of nicotine. They had acquired the habit from the occasional visits of traders

or recruiters, but were only visited perhaps once or twice a year, so had no means of satisfying their craving in between times.

Night navigation in this region is very dangerous. The islands are practically unsurveyed and existing charts print warnings across the face of them that 'the position and extent of these islands is uncertain'. We left Laughlan for Cannac, a little abrupt guano-covered rock, surrounded by thousands of sea birds and a terrible stench. We spent the night hove to here so that we would not strike the dangerous Woodlark reefs by night.

Wednesday, June 25th, 8 a.m. - Had a very good night, with a clear sky and just enough breeze most of the time to breast the current and stay close to the steep rock. We find that the current here is not a steady set, due to winds or ocean currents, but decidedly a tidal current, running in approximately a south-east direction with the ebb, and north-west with the flow, for we had a heavy south-east set coming to Cannac from Laughlan and we arrived at the rock at just about low water. Later, about 7 p.m., we began to experience a strong reverse current, as the tide was rising. In the middle of the night, when the breeze fell for a time, we dropped the anchor on a bank several miles

a time, we dropped the anchor on a bank several miles from the rock, quite at sea. It was a peculiar experience to be anchored there with no land about, only a distant rock, but it saved us from getting set down to leeward with the current.

Now, as I write up the log, the rock is just disappearing below the horizon, and from up the mast one can see tiny Nubara and Mellim ahead, landmarks to guide us through the reefs to Woodlark, island of bygone gold-rush fame, and stopping place on our way to the Trobriands, which with the mystexious Laughlans, are the anomalies of this

part of the ocean, supporting an isolated group of Polynesian type natives far superior in material arts and beauty to the black Papuans and Melanesians that surround them. The Trobriand Islanders are renowned for their woodcarving and for the attractions of their women.

The breeze has gone to the north of east to-day, for the first time in ages. Ran over shoals not on chart — about five fathoms minimum. One learns what it felt like in the early days, days of Cook and Tasman and all the rest, for navigation here is practically a case of feeling your way, unaided by accurate charts as one is in other parts of the world. Woodlark, for instance, is only dotted in roughly. The authorities do not even attempt a description of the currents.

7 p.m. — By midday we were well past Nubara, and the island of Woodlark lay before us. Soon we were following its northern shore looking vainly for an anchorage. The chart was of no help and the Pilot does not seem to credit Woodlark with a northern coast. We passed mile after mile of perpendicular forest-crowned cliffs, and hopefully approached one after the other three high rocky points that hid what was beyond, and each time were disappointed in finding only more steep cliffs on the other side, with no bottom up to the very walls themselves.

At last we came to a prominent headland, just as the sun was getting low, and there — a mile deeper in — in a wide bay, we found a beautiful little anchorage over white coral sand in eight fathoms of water so clear we could see the shackle and ring of the anchor on bottom. There was a little beach and I went ashore to see what I could see, and shot a couple of pigeons for supper. I also tried to go into the bush a bit, but this was impossible without cutting one's way.

The enormous trees echo with the cries of parrots and other even noisier birds, while colourful little ones of unknown species dart about everywhere. This day was blazing hot, but now with evening, there comes the cool mountain

breeze, and we are refreshed from a swim and a bit of relaxation. We shall be off before dawn, so early to bed.

Thursday, June 26th.—I awakened from a confused dream in which someone was being murdered and screaming for help, and sure enough, raucous cries broke the stillness of the night—but it was only a big parrot, perched on our springstay, screeching imprecations at some dire enemy on shore who returned in kind. Yesterday morning at the same hour (it was four) there was also a disturbance on board, as our big red plumed cock crowed mightily and patiently, unwilling to admit defeat in getting no response. This morning he is no more, for a part of him has already been converted into vitamins, and soon the rest will follow.

So we rattled in the chain and got the hook aboard and were under way along the steep black bluffs, with a cool camp land-breeze laden with mysterious sensuous perfumes of exotic flowers. We moved silently, without a wave upon the purple water, and gauged our progress by the movement of a bright star along the hilltops. Soon faint and changing colours traced patterns in the east, creeping slowly through the sky like frost on windowpanes. Then suddenly and wondrously, the golden sun leaped into sight and day was once more here. Hour after hour we sailed along high bluff green-clad shores, and as the sun fell low we tried to round the final point of Woodlark, only to find a fiveknot current flowing around against us. We had hoped to find an anchorage there, somewhere around the other side, and start out in the morning for the near-by Marshall Bennett Islands, but now we found this impossible, giving up the attempt to get around under sail and power when a vicious back eddy threw us quite out of control, and to within ten feet of greedy coral heads offshore. So we laid a course for Gawa Island, eighteen miles off, and sailed all night.

Friday, June 27th. — We did not reach Gawa until 11 a.m. to-day, for even at sea the current persisted in turning

against us. We found very poor anchorage in the lee of the island, where I had hoped to stay a day or so, and were deceived into dropping the anchor in twelve fathoms, thinking it to be only half that from the extreme clarity of the water. This meant that we should have to have help in getting it up again, for twelve fathoms of three-eighths chain plus a seventy-five pound anchor are too heavy for us to get up in a hurry, and we should have to have quick work in getting away from the coral heads and back eddies. The currents came around from both sides of the island and met here in the lee, causing a bad swell. I was quite uneasy while on shore, especially as with the new moon I feared a change in the weather from the calms and light breezes we had been having. So the stay in this interesting place was cut short to the one day, and we sailed off just at dark.

The Marshall Bennett Group consists of five islands: Gawa, Kwaiawata, Iwa, Kitava, and Dugumenu. With the exception of Dugumenu which is a low coral island, all are elevated coral atolls. This is a most interesting formation and equally unusual. The island was (using Gawa as an example) at one time a regular coral atoll like Laughlan. It was quite circular and of two miles diameter, a ring of land enclosing a deep lagoon and standing on a plateau of steeply shelving coral. Some disturbance had thrust this out of the sea, its lagoon dried up, and there it stands now
— its form perfectly preserved. The former lagoon bottom is now a sunken central depression covered by a rich heavy vegetable mould that is extraordinarily fertile. This former lagoon is from 100 to 200 feet below the circumferential rim which is itself about 400 feet, and it supports a thick growth of vegetation with gardens and hamlets alternating over a great part of its area.

There are a dozen or so hamlets at equal distances around the level upper surface of this 400 foot coral wall, built in clearings in the forest of huge trees. To get to the villages on top from the sea one scales the cliff by a precipitous path and ladders, cut and built into the coral wall. From on top the natives descend to the sunken plateau inside — where they plant their yams and pumpkins and bananas — by means of a still more precipitous natural ladder, formed of steps in the coral wall, and pieces of wood set in here and there as rungs. It is no easy or safe climb, usually slippery and treacherous. But over this trail it is necessary to carry all their produce, and water too, for they must bring down their gourds and coco-nut shells to fill them at a seep down below, and carry them all the way up again to their homes on top. Their life is a continuous round of ups and downs.

Each little village or hamlet consists of the members of a single clan and each clan has its chief or head man. The strongest of these is the chief of the whole island. News or scandal is passed around the island in a most unique manner — being shouted out from the scene to the nearest village, which digests it, embellishes it a bit, and in turn shouts it on to the next settlement, just within earshot of a lusty voice. Thus, when we had closed with the land and approached its nearest shore, we could hear the echoing shouts of Sail-O (the one English expression which has universal use in the Pacific) from succeeding points along the rim of the island. And I had no sooner climbed on top and started my tour from the first village, than the news went forth in waves of sound, and soon the story had completed the circuit without a soul having left his home.

Here, as at Laughlan, they were insane for tobacco — but did not beg it so openly, rather offering produce, baskets, woodwork, etc., in exchange. The villages were as clean as a whistle. The natives have much Polynesian in them, and are not suspicious or afraid, or sullen as the Solomon Islanders. They showed their villages with pride, pointing out how clean they were, brought forth their handsome





Top: Golden skinned Kitavans came to beg tobacco

Bottom: A New Guinea sorcerer with a ceremonial seat and drums

midens to be appraised, in their chie little grass skirts, eplaining that those smeared with black soot were in mouning, and so on -all without a word of English spoken. Here they are never visited and know not even a little pidgin.

My entourage gradually increased, and by the time it was getting late and I had explored every nook and cranny, we Fere quite a crowd gathered on the beach. We boarded Strap, to barter for the various things we wanted with tobacco and fish-hooks. Trade being finished, six men set to on the chain and soon the anchor was aweigh. The last of them piled into their canoes and we were off — under power with no breeze, but with powerful currents which for the moment aided us and sent us rapidly past Kwaiawata, the next island of the little group.

It was now dark, and we moved swiftly by the abrupt cliffs. The people here had seen us leaving Gawa and like the sirens of Odysseus tried to lure us to their rocky shore with pleading shouts and cries—their only thought of course being tobacco. Soon the island dropped astern. The

When we were a good five miles off there was a shout close by and a canoe hove in sight with only one man who cries faded into nothing. paddled as if his life depended on it. He caught up to

'Tobacco!' he gasped, and fell exhausted in the canoe. us slowly and clutched the rail: He had brought three coco-nuts and a carved stick to trade. I pitied him and tossed a bit of tobacco into his canoe. We hurried away, to get a safe offing from the islands for the night, leaving him there alone on the sea in a frail dugout canoe. The night was very dark, and hid from sight his island home which lay a good five miles away. All for a

Saturday, June 28th. - We now came to the island of Iwa, after a very bad night in which the expected change of scrap of tobacco!

weather developed in a series of howling squalls that settled at 3 a.m. into a hard southerly, the first real wind for several days. Dawn found us close to Iwa, an island also of upraised coral, but with still steeper walls that are ascended by ladders from the sea. There is no anchorage, except that in calm weather a small ship such as this could anchor temporarily on a ledge on the leeward side, close up to the coral wall. Although the sun was only just rising as we passed slowly along in the lee of its mile of coast, we were not too early for those on shore.

Iwa is the home of beautiful golden-hued maidens, noted afar among the islands for their attractions. We regretted the fact that the weather prevented any possible chance of anchoring here. Soon I saw ahead two specks of black, and thinking them to be rocks turned aside. As we drew closer I saw that they were the curly heads of laughing girls who had swum out to intercept the boat. Unclothed, but quite unembarrassed and at home, they examined the curious ship and pleaded for tobacco, which they put in their ear-lobes and then jumped laughing into the sea like the water nymphs they were. As we left the last point we encountered three more glistening forms in the sea, and after making the same offering to beauty sailed on to Kitava, 27 miles to the west — quite regretfully I may add. We soon arrived with a half-gale abaft, the beam, and cautiously working our way inside a small islet a couple of hundred yards offshore we found anchorage between it and the mainland of Kitava in about five fathoms, sand and coral. It was just 52 miles from Gawa. The southerly had increased steadily and by now whistled merrily in the rigging even in our sheltered position. But what matter? We were snugly anchored, and would stay here a week or so to get to know these interesting people and lay in supplies. We were in need also of a bit of rest before getting under way for New Guinea.

Upon the beach stood a tall gaunt white man clad in sleeveless flannel shirt and frayed white ducks cut off at the knee. Around his neck hung a red bandana. A few straggling locks of faded blond hair protruded beneath a battered old felt hat. Above his heavy boots and spiral puttees projected bony sunburnt knees. Around him clustered a group of perhaps two score golden-skinned, black-eyed native girls. They were clad in chic little grass ballet skirts and wide smiles, and those who were near enough clung lovingly to the tall exile.

Never have I seen a more perfect musical comedy setting than the scene which was presented there underneath the palms of the shining white beach. Only the ukuleles were missing. As I stepped ashore from the canoe this haggard
Don Juan waved a possessive hand over his numerous harem.

'Take your pick but don't be in a hurry,' he said, 'there are plenty more waiting up at the house. I guess half the girls

of the island are there by now, because we saw you coming. We climbed the path to his house, a rambling frame structure surrounded by innumerable goats. Y— has been building this house for many years, but it never progresses beyond a certain point for that would spoil everything, and there would be nothing to plan for. We arrived, accompanied by the super-Zeigfeld chorus, and found that he had been very modest in his estimate. I think that all the girls of the island were there. the girls of the island were there. And what about the men, you ask? Oh! yes, there were one or two native men working about the place, making copra perhaps, but none came near the house. Y— does not like to have men about the place.

We reviewed the assembled harem and took our ease in low deck chairs. Eventually the confusion died away and only a favoured few remained to amuse us with their ridiculous little tricks, their Jew's harp music and their laughter. They danced for us that night beneath silvery palms in a sensuous rhythm of desire.

I pieced together from fragments of conversation a bit of the history of this eccentric recluse. Later, while in New Guinea, I learned more from a friend of his family. It seems that Y— is the oldest son of a very aristocratic family in Tasmania. He became estranged from them through some youthful folly and never returned, exchanging the wealth and vast estates to which he was heir for life on a tropic isle. First he had gone to New Guinea in the gold rush; but moved on to Kitava where he found a life utterly free from convention and restraint, and he would live and die on this idyllic island beneath his slender

palms.

We stayed several weeks until, under the tuition of Y—, bachelor extraordinary, I learned a good deal of the ways and thoughts of these interesting people. I was especially interested in their elaborate system of mythology and their sorcery which plays a very important part in their lives. Sorcery among primitive peoples is something which a Caucasian mind cannot fully understand. Formerly I was very sceptical myself, but after two years among the various races of the Pacific I have come to realize that there are things connected with the life of primitives of which we have no comprehension. There is something intangible, something upon which one cannot lay one's finger, something which one cannot even believe — but still it is there. Pouri Pouri it is called here, black magic in Africa. Invisible, intangible, it permeates both the waking and the sleeping hours of these primitives. So absolute is their belief in sorcery that they will die from nothing more than fear of it. Such was the case of Makaibasi and Potubomata.

Makaibasi possessed a beautiful wife. Another coveted

her. Makaibasi learned that sorcery was being employed to accomplish his death. One day he found in his path a small split stick holding a fragment of poisoned glass, placed where he must surely walk. He found it before it had slashed his leg, and he examined the instrument carefully that night. I was told that this is a favourite means of insuring non-failure of a magic spell.

Makaibasi became despondent. He knew that he was to die. He did die two days later. They called it Pouri Pouri. Perhaps. More likely it was fear of Pouri Pouri. Any primitive is quite capable of simply lying down and dying if he believes that he must die.

Etera, for that matter, almost up and died just to spite me two different times when I had not let him have his own way. In any case Makaibasi was certainly dead and in due time was buried and disinterred the required number of times to satisfy the correct social usage, and his bones were distributed as souvenirs among his relatives. The lady, after a seemly period of mourning in which she cut off all her hair and blackened her entire body with soot, undoubtedly expected to marry the man who caused the death of Makaibasi.

The following Wednesday a man called Potubomata died suddenly after returning from a canoe trip in perfect health. This was the revenge death for Makaibasi. Potubomata was not the man suspected of causing the other death, but a relative of his. In these feuds it is not necessary to kill the man who committed the first crime. Any member of his clan will do just as well.

This sorcery idea is carried so far that rarely does one hear of a natural death. They are all blamed in some way or other upon Pouri Pouri. No sooner is a man taken ill than he tries to ascertain who can be the cause of his trouble. He tries by counter spells and charms to conjure away the evil spell, or may even try direct bribery upon the enemy.

If all this fails he will work himself into such a mental state that he will undoubtedly die.

There has recently been a great deal of interest in America regarding companionate marriage or other less permanent unions than legal marriage. In the Trobriand Islands, of which Kitava is an example, there has existed for centuries something very similar. Girls of six to eight and boys of ten to twelve already form temporary liaisons. Although their parents are aware of these intrigues they are apt to be somewhat surreptitious. Later, however, the children form more permanent unions, living quite openly with each other, usually in the home of the girl. Thus the more capricious intercourse of childhood (which has been proven to occur as young as six years in the case of girls and ten in the case of boys) steadies down into a more permanent connection, becoming, in fact, a species of trial marriage. At this stage of the game the couple will probably go and live together in a very interesting institution called 'bachelor's house'. Here we find quite a large group of unmarried boys and girls living together. These are serious unions, and while in effect will not be broken by either party.

A permanent marriage may result from these trials, or they may be dissolved when either party falls in love with someone else. Usually there are several temporary connections before a final marriage. When it seems that this more or less prolonged cohabitation is serious, the proposal of marriage comes from the parents of the girl who speak to the boy's family. Arrangements are completed, probably without consulting the children, presents are made by both sides, and the marriage is formally consummated. These marriages are invariably successful. Divorce is unknown and both parties remain chaste except during the many fixed seasons of festivity and permitted licence which occur particularly at the sowing of the crops, when all the men and women go into the fields and mingle.

Scientists have studied the subject of birth control among these people but disagree as to its existence. I believe that there is some form of efficacious birth control here. Yhas lived for many years on this island, and white traders have come and gone. There is not a single half-caste child to be found. I could learn of no undesired children resulting from the trial unions of the people themselves. Abortion is undoubtedly practised at times, but certainly does not account for the universal absence of unwanted children. Several of the more intelligent Kitavans told me that offspring could be avoided through the use of sorcery, consumption of herbs, and dietary restrictions. As a matter of further interest I was told in some sections of the Trobriands that sexual intercourse had no bearing upon conception, which was brought about by the spirits of the dead - Baloma - who placed the unborn child within the mother. Twins are a disgrace.

'Only pigs and dogs have more than one child at a time,' they said. 'If it does happen it is because the woman ate a double betel nut or double banana.'

The whole subject is extremely interesting, but there is no place in this book for a lengthy discussion.

The Trobriands have a Matrilineal Society, in which descent, kinship, and every social relationship are legally reckoned through the mother only. Women have a considerable share in tribal life, and take part in economic, ceremonial, and magical activities. The whole organization and culture of the Trobriand Islands is unique. One could write a book upon that subject alone.

For several days we had been buying all sorts of things, from food to drums, effigies, etc. All our bartering here was done with stick tobacco — the gummy pressed tobacco, like a stick of liquorice, which is the basis of all trade in this region. We bought a new supply of it from Y—. From

all over the island the natives came with things to trade.

Dugouts clustered about Svaap all day long.

Suddenly we were given a practical demonstration of supply and demand - a lesson in economics. Three large sailing outriggers came back from an annual trip to the main island with a quantity of tobacco. Our boom market collapsed. Trade ceased. There was a surplus of tobacco on the island. There were still some things we needed but it was now practically impossible to buy anything. They were not interested in further trade and simply said 'No'.

The powerful influence of tobacco in the South Seas is amazing. It is one of the strongholds which the missionary has upon the natives, for by doling it out judiciously he can keep his following. Tobacco will buy not only the souls of these people, but often their bodies. Women can be bought or borrowed for tobacco. In some groups a man will lend you his wife for a few sticks of tobacco. The standard price in one instance was ten sticks. It was Etera who discovered this interesting fact. Etera does not use tobacco. Suddenly he started asking for tobacco rations. I was puzzled for quite a time. Then I discovered that he had a lover. She was exacting a penance of ten sticks from him each day.

On Saturday, July 5th, Y- and I descended to the beach surrounded by the usual harem. He had been a delightful host and I hated to go. I have never become callous enough to sever new friendships without a pang. But when I turned for a last wave, before sailing round the point, my sadness turned to laughter. For who would not smile at the sight of a solitary white man sitting on a coral beach surrounded by a dancing circle of ridiculous little grass-skirted imps. But now we must leave the Trobriands and be off for that great dark island of New Guinea.

CHAPTER XVI

A WHISTLING 'trade' swooped around the island from the south-east. We were bound for the north-east coast of New Guinea. There, according to the Pilot Book, we would find Morobe, seat of government for the Mandated Territory, formerly German New Guinea. It was a dangerous, reef-infested run. Long ago D'Entrecasteaux explored this region and plotted it roughly. The chart indicates the area by only a few rough dotted lines, labelled 'Reefs seen by D'Entrecasteaux'. Evidently there has never been a modern survey. We spent anxious night-watches looking out for 'Vigias' — those worrisome reported shoals of doubtful locality and uncertain existence which abound in this part of the seas. Luckily we found none.

Late one day the clouds on the horizon ahead resolved themselves into definite shapes and suddenly we realized that these towering masses were the mountains of New Guinea. Dawn revealed mist-shrouded peaks as far as eye could see, range piled on range, into infinity.

We found Morobe, but the entering beacons were not there. An unnatural stillness hung over the town. A disconcerting feeling that there was something queer about the place crept into my blood. There were the offices and sheds along the shore. Standing guard on the hills behind were big pretentious homes that looked out to sea. But where were the inhabitants?

Three black natives and a few dejected looking hens were the only sign of life. I wondered if a plague had swept life from the town, or perhaps a massacre. Then I looked closer and saw that the buildings were dingy, weather-beaten, deserted. Whatever had happened to the inhabitants was

н 225

not of recent date. Later, when the mystery was solved, I learned that Morobe had been abandoned in favour of Salamaua because of the latter's proximity to the goldfields.

It was interesting to compare a German-built town with the usual British settlement. The Germans had built here a town adapted to material comforts and beauty, with large spacious homes and landscaping. The British are different. They start in on outside work at once, living in any old kind of place and neglecting comfort. You often find them practically camping out even after years have elapsed. Morobe was still haunted by the spectres of the methodical, comfort-loving Germans who built it.

Another relic of the Germans was the weird jargon used by local natives in talking with us. We had by now acquired quite a familiarity with 'pidgin'. But here we were confronted with an entirely different thing, and only with the greatest difficulty could we understand what the natives said. It seemed that the Germans talked with natives in a pidgin English — not knowing the English language themselves. The result was an indescribable mass of Germanized English expressions put into pidgin. To order your boy to change his soiled loincloth you would say 'Rouse 'im this fella lap lap'. Naturally it is a most amusing language.

I saw here some of the most peculiar fish I have ever encountered — weird ghost-like creatures with invisible bodies. Only the bony skeleton could be seen swimming through the crystal water. When disturbed they would lay down a smoke screen about themselves by emitting clouds of black stuff that formed a stringy substance which clung to a stick like delicate seaweed.

We were short of supplies, having planned to obtain them in Morobe, so we soon hurried on to Salamaua. All day long we followed the string of islets just off the coast. The sea breeze lasted until four o'clock in the afternoon and died away to leave a fog bank all along the coast. This was

the first fog I had seen since leaving the Americas. The atmosphere was hot and heavy and as evening fell we lay motionless on the sleeping sea. I thought of Kipling's verse:

The sultry tropic breezes fail That plagued us all day through; Like molten silver hangs our sail, Our decks are dark with dew.

It could have been written for us as we lay there after the oppressive heat of day.

The Salamana lighthouse winked at us so invitingly that after waiting for the land breeze which failed to materialize we went on under power. After we had rounded the long narrow Salamana peninsula, the brilliant moon proffered guidance and showed the way to the harbour four miles farther in. Here, at last, was a town. Bright lights greeted us as we anchored close by another white ketch which lay there.

On shore a drum beat out its throbbing call, and sounds of revelry echoed over the bay. What a queer setting for a new Klondike! We slept but the drums beat on.

Countless lives have been lost, and fortunes made, because of gold — but surely the most romantic chapter of all has been written down here in far-off New Guinea. Cannibals, head-hunters, impassable mountain ranges and jungle — conquered at last by man's newest vehicle, the aeroplane. Without wings man could never have wrested gold from its hidden caches in New Guinea.

The goldfields lie deep in the interior, protected from the sea by knife-like ranges of towering mountains and dense jungle. Before the advent of the aeroplane commercial development of the mines was out of the question. The trip in and out was too hazardous and lengthy. Then it was found that planes could land on inner plateaux and the

whole aspect of the thing was changed. This gold in the wilderness developed one of the most advanced projects of modern aviation. Heavy dredges were needed to work the gold on a paying scale. So special cargo planes were built to handle the three-and-a-half ton sections of machinery.

It is dangerous flying, with towering mountain ranges and narrow winding gorges. The cloudbanks are apt to drop without a moment's notice and trap the pilot in an impenetrable blanket. Just before we arrived a big Handley Page was caught in a mountain pass. The pilot managed to put her down somewhat gently in the tree-tops where she and her occupants remained for some time. No one was fatally injured, but although the other planes soon located her, it was days before a rescue party could cut their way to them. I asked a savage what he thought of flying. He grunted and shrugged his shoulders.

'Fashion belong white man,' he said.

This is in line with their usual matter-of-fact acceptance of the white man's peculiarities. One might think that the sky had always been full of these roaring monsters for all the excitement they cause once the initial novelty has worn off.

Should the white masters arrive with a machine to tear the very mountains bodily from their roots and fling them into the sea to get at the treasure in the core of the world, the natives would merely shrug their shoulders.

'Fashion belong white man,' they would always say.

Sometimes there are very amusing aspects. The mission natives, with their literal understanding of heaven and hell as portrayed to them by the long arm of the gospel, are apt to be disillusioned. One day when I was at the Salamaua aerodrome a big black savage with shell bracelets and a ring in his nose, only a year or so removed from cannibalism, landed at the aerodrome with his white master. They had flown out from the goldfields. The native had recently

embraced the Christian faith — probably to acquire the showy medallion which now hung from a chain around his neck. He had not been afraid during the flight. Instead, he had never ceased peering about while in the air, up and down and on all sides — as if to ascertain of what ingredients the sky was made. But when he landed he wore a quizzical and somewhat disappointed expression upon his rather handsome features. I asked him about the trip.

'Huh!' he grunted. 'Mission longtime gammon 'long me, thasall (but) now me savvy. Me run on top all time bush he stop down below. Me look about plenty thasall Jesus he no stop! Now me savvy ass belong talk (the real truth).'

In other words he said that the mission had long fooled him, but now he had gone up to heaven, above the clouds, and had left the earth far below. He had looked about very carefully, but had found no Jesus there in heaven. Now he knew the real truth and was entirely disillusioned.

The gold rush has passed the wildcat stage and almost all the claims have been accumulated by two or three big companies. There are too many expenses for the small man, permits, regulations, controlling the minimum number of workers on a claim, planes, bond for good behaviour, and evidence of financial security. It is available only to a man of means or to a company. The small prospector, the real pioneer, has moved on — perhaps to find a new loadstone elsewhere and start a new rush.

We had expected to find the dry season along the New Guinea north coast, for it was July, and the easterly monsoon still held sway. However, we seemed to have plunged into the midst of a very wet rainy season. All day and all night it would rain — and what rain! I began to have visions of an exceedingly uncomfortable voyage. As we had some 1300 miles to go before we could say good-bye to this vast island it was no small misfortune. However, I found that

oly a local codition between Morobe and

A lonely patrol officer statioed some 60 miles along the coast was to have received suppes from Salamaua, but the only available boat had been stoen by its native crew. I offered to take the things and leftat sunset on July 18th with one ton of supplies and a new police-boy for Officer Kyle of Buki. The boy - any grown native male of this country is called a boy even though hihas grey hair — was a powerful black savage with the native police uniform of blue loincloth and leather belt. He removed his pancake hat from his bushy head and put it with his rusket. He then carefully placed himself on the bunk I assigned to him and remained there frightened and sick until we sigh, td Buki.

The chief government officer in Salamana afte golained that the police-boy would pilot us to Buki. It is chart of those small off-lying islands. Next day we e confronted by an intricate chain of small islands sceended by reefs. The police-boy denied all knowledge of these waters so we were in a quandary. I did not even know on which island the station was located but on a hunch an close to the reef and found a very shallow pass that looked navigable. There was a big swell running, and although it navigable. There was a big swell running, and although it broke constantly across two-thirds of the pass, the deeper portion was all right except for occasional large rollers which broke clear across. We wanted until three heavy seas had crashed across the pass and then slipped through. I stayed at the mast-head as usual for this work and conned her through by watching the bottom. In a moment we were in a beautiful glassy lagoon with suplendid reflections of shores, clouds, and sky playing upon it surface.

There were some grass huts on a shore. We ran close in and our passenger jabbered 'talk place, with the natives. Buki, we learned, was only a half-mile away. We found the station. The young Australian Officer Karle, in shorts and bare

feet, welcomed us to Buki with a crowd of good-natured natives. I felt really sorry for the poor chap, after he had vainly searched his goods for mail. The head office in Salamaua had forgotten to include it in the shipment. When one realizes that Kyle had been nearly a year without word from the outside one can understand what a tragedy this was.

I was the first visitor in the history of Buki Station. Kyle did all he could to make it a most interesting stay. I was given an intimate glimpse of the life of a lonely officer with many thousands of Stone Age primitives under his sole charge. With a handful of native police he must spread the idea of government among the savages and extend his sphere of influence deeper and deeper into the bush. He must judge all troubles among his subjects and must discourage head-hunting and cannibalism, using force if necessary, but preferably diplomacy. He is man-of-all-trades: pioneer arm of law and order, judge, engineer, road builder, doctor, guide, counsellor, and protector of the tribes that have placed their faith in government and in so doing have learned fear of the more warlike tribes beyond.

The native police-boys are an interesting study. They are adaptable, usually taking their work very seriously. Beneath the childish exterior of these sons of the Stone Age lies deeprooted cunning. When I was in Buki the native sergeant solved a murder mystery, tracked down the murderer and brought him in to camp, with an acuteness that would have done honour to Sherlock Holmes himself.

Recently on the Sepik River a particularly warlike tribe of head-hunters within the so-called 'controlled district' went on the loose. A war party of about fifteen men raided another tribe and each man took a head. A police-sergeant from the solitary Ambunti post up the river went out single-handed, studied the case, located and accused the killers. He arrested them — the whole lot of them — rounded them up

and marched them in to gaol, making each man carry along as Exhibit A the head he had taken.

Sometimes this latent cunning takes less lawful outlets. There was a young man who was the only survivor of a family raided and killed by a tribe across the river. He grew up to avenge the deaths as is the custom. But before he had grown old enough to accomplish this the Government came and established a post nearby. He was now taught that he must not kill and was in a quandary. The villain came along in the form of a sophisticated ex-police-boy who offered to see that the revenge was accomplished for pay. In these blood feuds anyone of the enemy tribe will suffice for the sacrifice. The ex-police-boy found out that a married woman of our young man's tribe had an affair with a man of the tribe across the river. He arranged a midnight rendezvous between the lovers by telling each that the other sent for him (or her). Then, when the ardent lovers were together he went to the deceived husband, told him what was going on and suggested that he had better kill the philanderer. This the husban d did, and in this roundabout way the revenge of the

orphan d did, and in this roundabout way the revenge of an native curvas accomplished — through the medium of latent While in ing sharpened by contact with civilization.

mainly for g Buki I learned a unique way of fishing, used rival the flying arfish and related species, rapier-like fish that water. The east fish in speed and ability to dart out of the slender hand minment consists of three parts: a tough water. The edse fish in speed and ability to dart out of the slender bamboo juipment consists of three parts: a tough a jungle tree, and is pole about 20 feet long, a large leaf from web is the product to spider web which is called kavari. This as fine linen thread, lonof a giant forest spider. It is as strong and when ready for a The web serves as both bait and hook, shaped like a cigarette. huse is crumpled up into a little wad. The procedure when filk holding the pole aloft. The lieshing is to drift along in the cance, In the middle of this is tied. It the leaf which acts as a kite.

the leaf which acts as a kite

and soars aloft, dangling and skittering the wad of spider web along the surface of the water. The garfish, thinking it a delicious morsel of some sort, shoots with lightning speed out of the water and seizes it. His teeth become all entangled in the web and he is unable to let go. It is then a simple matter to pull him in. We became adepts at this exciting fishing after several expeditions.

The pidgin name for garfish is 'one fella long fella mous (mouth)', which is reasonable enough, for of all the fishes this one certainly has the longest mouth. But one day we caught another kind, similar to the garfish but shorter. We asked the chief's son who was fishing with us what it was.

'Oh,' cried he, 'him one fella long fella mous, thasall, mous belong him he short fella.'

Their descriptions are often roundabout, but certainly apt. I particularly got up early mornings to send Kyle's boy after hot water for shaving just to hear him reply, 'Hot water he no hot!' Even better is the report you will invariably get from a boy sent to do something he is unable to do. He will announce with a crestfallen expression that 'Me like make him, thasall, me not enough.' What could be more expressive than that. He would like to do it but he was not up to the job. Any nut or fruit of a tree is naturally called 'pickaninny belong diwai,' diwai being of course the word for 'tree'.

The wife of a man I met in Madang was very thin. I heard a servant boy refer to her as 'Mrs. Bone-Nothing', and in the same discussion a rather stout lady was spoken of as 'Mrs. Grease-Too-Much'. Any white man commanding respect is always called 'Master'. A government chief is 'Big Fella Master'. Poor white trash, or unimportant white men are 'Lik Lik Master', meaning little master. When travelling with government officials the natives referred to me as 'Master Nothing', meaning no disrespect but signifying that I was unconnected. They did not know

н*

where to place me. The whole language, for it really is a language all its own, is exceedingly refreshing. To give some idea of what pidgin is like from the fluent tongue of a native I give here the legend telling how the cassowary lost its wings, as told to me by Matuan, son of the native chief of Buki.

NATIVE LEGEND - HOW THE CASSOWARY LOST ITS WINGS

Before too much, he no got man he come up yet. Now this fella time altogether pigeon he got wing - all he savvy run on top - all he savvy talk too. Allright now, kai kai belong all he no plenty. All the time cockamor all the same ballus all he like kai kai - muruk thas all run him all time all time - now finished him all pickaninny belong diwai. Now cockamor two fella ballus hungry no good. Allright, all pigeon he cross too much along muruk, now all he fasim talk. Now cockamor he got one fella binatang, friend belong him, him be binatang savvy kai kai diwai. Allright cockamor he talk him friend belong him. Now cassim him bring him along one fella diwai he got plenty pickaninny. Allright, binatang behind him talk belong cockamore he kai kai inside belong hand belong diwai. Allright. Now all pigeon he come gammon kai kai along this fella hand. Allright. Muruk look him all he kai kai, now run he come, like pull him kai kai belong all. All pigeon kerap. Now muruk he like sit down kai kai, thasall, muruk he got heavy belong him. Now hand he broke, now him he fall down straight along nail belong pit pit, shoot him inabout hand belong him. Two fella hand belong him broke no good.

Allright now all time muruk he no got hand true belong him, now he shame too along all gammon him him no good. Now all time you me look him muruk one fella thasall he walk about along bush — no got one fella pigeon friend belong him.

Vocabulary

Muruk — the cassowary — ostrich-like flightless bird.

Pigeon - refers to all birds.

Kai kai - to eat.

Cockamor — the hornbill, a large bird of New Guinea.

Ballus - the native pigeon.

Diwai - tree.

Binatang - insect.

Gammon - make-believe or joke.

Kerap — to take to one's heels.

Pit pit - bush.

Behind him talk - to do as one is asked.

English Version — How the Cassowary Lost Its Wings

Once upon a time there were no men in the world. At that time all birds had wings, all could fly, and all could talk. There was not enough food. Whenever the hornbill and the bush pigeon wanted to eat the cassowary chased them away and ate all the fruit. Now the hornbill and the pigeon became very hungry. All the birds were angry with the cassowary and held a conference. The hornbill had an insect friend, who knew how to eat wood. The hornbill talked to his friend. He got him to come along to a tree with plenty of fruit. Now the insect did what the hornbill said, and ate the inside of a branch. Now all the birds came and made believe eat on this branch. The cassowary saw them all eating, and came in a hurry to steal all their food. All the birds took flight. The cassowary landed on the branch to eat, but he was very heavy. The branch broke and he fell straight down upon some long thorns in the bush, which pierced his wings. Both wings were broken and useless.

Ever since then the cassowary has had no real wings, and

he became ashamed because everyone made fun of him. And now whenever you or I see a cassowary he is walking about alone in the bush, without a single friend among the birds.

Ever since reaching the easternmost of the South Sea Islands I had been studying the procedure and results of missionary work. Although I am fundamentally tolerant, seeking the good in people and institutions, I had found very little that was praiseworthy in this calling. Working westward to the more primitive groups, the New Hebrides, Solomons, and New Guinea, I found still less to be pleased with, although I did find a splendid example of commercialism in the missions, which have become the most profitable enterprises in this region. They acquire everywhere the most desirable lands and compete unfairly with legitimate traders, and with other creeds.

I had seen competition between the various missions wherever I had gone. I remember particularly one little island in the New Hebrides that had been all Catholic. The père returned from a vacation to find the whole island gone Protestant, reconverted during his absence by a newly arrived missionary. There was a case in the Solomons where the population of an island was pretty evenly divided between two rival faiths. Both gave out a ration of tobacco to the converts. Suddenly one mission stopped this practice. All their converts went over to the opposition, which still supplied the weed. This is illustrative of the depth to which religion penetrates the primitive mind.

This unscrupulous competition was particularly rife on the north coast of New Guinea. It was a virgin field for mission work. The bewildered 'heathen' would go to the highest bidder. Hijacking of converts grew apace. Just when a mission was running smoothly another would come along offering a more delightful heaven, or perhaps a shinier medal for the convert to wear around his neck as a reward for his conversion. Thus rivalry and ill-feeling became intense, and to avoid further trouble there was an arbitrary division of religious spoils. The Lutherans obtained all the coast as far as Finschaven, their headquarters, while the Catholics got the territory westward of this Mason and Dixon line and made their headquarters at Alexishaven. Each faith must work only within its bounds and cannot seek converts across the line.

In spite of everything I had seen I was unprepared for what I found in New Guinea. The wealth and influence of the missions here amazed me. This is one industry which has escaped the depression. We came first to Finschaven, exclusively a mission settlement. The profitable commercial activities here impressed me so much that I was sure we had reached the peak of mission opulence. That was before I knew Alexishaven.

The affluence of Alexishaven was brought home to me the moment we arrived. There in the palm-shaded lagoon lay a splendid new Diesel schooner belonging to the mission. It had just come from the builders in Sydney, in exchange for \$70,000. The magnitude of the mission was astonishing. The copra plantations extended for many miles in all directions. There was a desiccating factory in which the coco-nuts not converted into copra are shredded and packed for sale in foreign markets. There was a great timber supply, a sawmill, furniture factory, machine shop, a printing shop where missionary literature is produced, a shoemaker's shop, tailor, boat builder, brick factory, rice mill, apiary, school, hospital, and native quarters of windowless, air-tight board boxes for the seven hundred converts that live and work on the station. I wonder if the people at home picture the missionary as a manufacturer, a tradesman, or a planter in white trousers, flowing white coat, and sun helmet. Not only in New Guinea, but generally throughout the Western Pacific, the missionary lives on the fat of the land, with the entire native population to draw upon for servants and labourers.

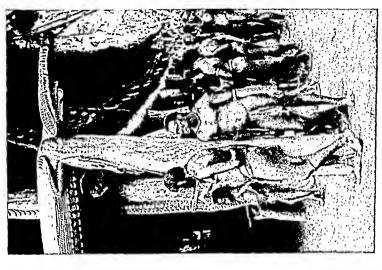
Usually in the Pacific, because of their religious affiliations, the missionaries are allowed to engage in commerce without the usual regulations. Here in New Guinea, however, they were going in for it on such a scale that the Government forced them to incorporate as full fledged business organizations. Hence we have the extraordinary firm names of 'Mission of the Sacred Heart of Jesus Christ, Limited', and 'Catholic Mission of the Holy Ghost, Limited'.

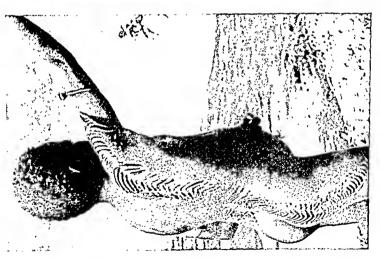
Etera nearly caused a general strike among the Alexishaven mission labourers. They work from dawn to dark for a monthly wage of one shilling. When he told them that the non-mission plantations were paying ten shillings a month for very much shorter hours there was nearly a riot. It seems that Etera took quite an interest in these poor converts, and instead of going about his own business he spent two days agitating. The first intimation I had of it was when the Bishop and the older Fathers came to me with worried countenances.

'Could you not keep your crew on board for the rest of your stay?' they asked. 'He is putting bad ideas into the heads of our children'.

So poor Etera remained confined aboard ship. But several times in the dark of the night black figures came creeping aboard to learn more of the ways of the outside world where Christians did not have to work for one shilling a month.

The whole present idea of the mission is wrong. Coercion is the active policy. The fundamentals of Christianity are replaced by a code of 'Don'ts' and 'Must dos'. The fact that Christianity is a religion of Love seems forgotten entirely. The primitive beliefs are replaced with a vengeful





presentatives, men who have studied the native's philo-

Father Kirschbaum, the one missionary on the Sepik River, is a splendid example. He has studied the needs of the natives and has guided them accordingly - not attempting to cast them in a destructive new die. Others are fanatical, seeking martyrdom. Such was the case of Father X-, who went to Makogia and deliberately exposed him-Ilf to leprosy. But the majority are people who have failed make a living in other walks of life, or who have drifted this work because of the security and ease which it ers. Some like to be little tin gods. I have met several nose mentality is little more than that of a moron. And could specifically name more than one who uses the service as a cloak under which to practise some form of perversion. -- I know a particular mission centre on the north coast of. New Guinea where a school is kept for the education of half-caste children that have resulted from liaisons between teachers of the Gospel and their native concubines.

On one of the eastern islands I met a representative of a prominent American church living in a state of polygamy with several native girls, under the pretext of teaching them domestic science.

There was a missionary on leave in Bali. He was stopping over a boat to see the island. We met in Buleleng one morning and got to talking about the people in his islands.

'When I first came,' he cried excitedly, 'they were naked like worms.'

He went on to explain how he had taught them that to expose the body that God gave them was sinful. He had finally forced them to go about entirely clothed, little realizing that in so doing he was probably signing the death warrant of many of them, for natives are much more prone to tuberculosis, influenza, and other diseases when they suddenly clothe their bodies. I suppose he also followed the

usual custom of encouraging them to build air-tight sunless semi-civilized board shacks with tin roofs, instead of the

healthy open thatch huts of their own.

The next day I met a group of tourists, taking pictures, and got to talking with a young Dutchman from Batavia. He said his day was spoiled. He had come to take pictures of breasts, but so far had had poor luck because another man always beat him to it.

'He gets there first for every nude,' said the Dutchmar' and photographs them so greedily that he frightens the

off. The rest of us haven't a chance!'

And he pointed to my missionary friend whose nath

had been naked like worms.

Father R—, formerly of Fiji, is an example of a different type of missionary. He went further than usual, being ambitious, and through crime, fraud, and usury, amassed a fortune. He now owns personally one of the finest copra producing islands in the South Seas and large estates in Tahiti where he now lives. He still assumes the garb and title of a French père although he was unfrocked in Fiji after getting his start toward fortune through a strange affair with a wealthy and mysteriously bereaved native widow.

There are various means of extorting money from the natives. A baptism fee is demanded. There are 'free offerings' at which individual natives are publicly shamed into giving more than they can afford. Money has been asked to 'Buy Jesus clothes'. I found in Espiritu Santo, in the New Hebrides, that natives were being fined for taking water from the river on Sunday! Old clothes that are donated at home for the 'poor heathen' are sold to the natives at high prices, as are also the Christmas boxes which are sent to them. I bought in Madang at a mission store native potatoes at a very high price. They had been bought by the mission from the natives — fifty pounds for an empty beer bottle or a tin spoon.

Many examples could be given, but I think it would be hard to find a more cold-blooded incident than an occurrence at the Leper Hospital at Makogai, Fiji.

The lepers, whose very lives are tragedy, are given a little spending money as Christmas comes near. With it they can buy themselves a few luxuries at the hospital store and have a Christmas party. There will be a few toys for the children. Perhaps for a few hours or days they will forget and know happiness.

In the doctor's absence a missionary came from another island, knowing that the lepers had their pittance. He held a service and took up a collection. The people were reluctant.

They hesitated about giving their few coins to build (as he said) an addition to a church on an island they would never see. He became furious.

'You are lepers,' he said. 'Your death will come sooner and will be more painful if you do not give all to the cause. And the tortures of hell will await.'

He left the island with all the money the lepers had.

I know of no death sufficiently painful for such a monster.*

Occasionally the missionaries create an amusing situation. Just before Svaap came to the New Guinea coast a mission there had a grand idea. The natives were making their copra. They were told that they must make one sackful for Christ for each sack of their own. This would prove the sincerity of their religion and would help counteract their worldly sins which might otherwise cause them to be tortured in Hell after death. (Hell in this case was the live volcano, Manam, which steamed away a few miles off the

^{*} This case, which was reported to the doctor in charge when he returned, was so flagrant that he took action through headquarters. The missionary was forced to return the money.

coast.) The mission would collect the copra later and see that it was safely delivered to its holy recipient.

Life went on smoothly. A certain trader somehow got hold of the story. One day a schooner came to anchor just off the main village. A strange figure stood on deck in a flowing nightgown. He wore a beard and long hair. Unless you looked closely you would not have noticed that the hair was teased hemp, dyed. The stranger reminded one slightly of Anton Lang in the Passion Play.

One or two of the native crew went ashore and somehow the rumour sped far and wide that the stranger was Jesus Himself, come for His copra. There was tremendous excitement ashore and runners went to all the outlying hamlets with the news. All day the schooner lay there, and all day a procession of loaded canoes propelled by awed natives made its way alongside. When the ship could hold no more copra the man that looked like Anton Lang offered thanks. Then the ship sailed off over the horizon, full of Christ's

copra.

It is high time for a change in the policies of most South Sea missions. Exploitation should stop. Present-day knowledge of psychology offers no excuse for the false emphasis which is placed upon sexual relations, which to the savage are just one of the normal body functions. Dancing and the creative art-instincts should not be suppressed as they are at present. We all know the evils of suppressions in civilized countries. Unless we go far afield we do not know the more disastrous results of forcing emotional repression on primitive people. They react to these unsuited theories and to the teachings that their natural modes of expression are sinful, by losing the very spark of life that quickens them. They become listless; they lie, steal, cheat, and are generally unhappy. It is depressing to go from an island of proud, spirited 'heathen' to one that is Christian.

I cannot understand this bigotry that causes a certain class of men to consider it their God-given duty to thrust beliefs upon others, for after all, the primitive peoples have as much right as we have to live their lives according to their own lights.

It may seem ungrateful to write in this vein of the missionaries, after having accepted their hospitality in many parts of the world. Almost everywhere they were very kind—lavishing food, drink and attention upon us. In several cases friendships developed which have been carried on by correspondence. These men will, I am sure, understand that this is not a personal attack. But very often I could feel that our intrusion in their little domain was really resented. Even then, there would be a strenuous effort to give an impression of welcome. I was to be impressed with a spirit of camaraderic between them and the natives, and of happiness among their flock: it would never do for me to see conditions as they really were.

That this policy has had good results is evident. The few wanderers who have penetrated these regions have usually been unable to spend enough time to get beneath the veneer. The smoke-screen of hospitality has covered a multitude of sins. It has avoided an undue amount of unfavourable publicity, for a man who has been wined and dined and made much of is loath to tell tales on his host, even though he has been able to peer through the froth and amber to the dregs beneath.

I should like to see a different sort of work among primitives. The campaign of the Rockefeller Foundation in the Western Pacific is a fine example. If we wish sincerely to help these people we should show them the way to better health and sanitation. Teach them not to kill. Guide their energies into constructive channels. Show them improved methods. Encourage co-operation, friendship, trade, and so on. But leave them their beliefs, their customs, dances,

ceremonies and arts. Don't force clothes upon them for they are healthier without. They will soon enough imitate the white people when in contact with them regularly, so that they will not offend the sensibilities of anyone. Show them kindness and understanding, unselfish help and guidance, and place before them convincing examples of the superiority of Christianity. If our religion is better than theirs they will come to realize this at the proper time. Surely the present spectacle of a dozen different Christian creeds competing one with the other for converts cannot be very convincing to the primitive.

There is a rhythm, an unfathomable urge, in the soul of primitives. It is expressed in their arts, but has never been understood by a European mind. It has never survived long contact with civilization. It has always been suppressed, or

destroyed.

There are not many primitive races left. Would it not be enchanting to cultivate their gropings in the dark just to see what would come of it? I believe something might develop from which we could learn a great deal. At least it would be an enveloping study.

I wonder if it is already too late.

For days we explored the New Guinea coast, finding anchorage wherever we might. When the coast natives were friendly and I dared to leave Etera alone on Svaap, I would make short trips into the bush. Sometimes we would meet unfriendly tribes, surly and threatening. Then we would watch our step carefully, leaving anchorage before nightfall.

Once, when anchored in a little uncharted bay, I awoke in the middle of the night to see many fires blazing on the beach. The previous day there had been but a handful of natives in the vicinity. Now hundreds were gathered there, stamping the earth around the fires in a menacing wardance. The bay was surrounded by reefs or we would have left at once. We kept watch. The moon rose and cast a weird light on the scene. At two in the morning I decided to risk the reefs. They were moving the canoes toward the water and I feared an attack. I remembered pretty well the location of the reefs and with the help of the moon we did a quick exit under power. Our luck held and we were soon at sea.

We came to the very interesting Umboi islands, where lovers sleep together in the girl's house for months before marriage, the girl being enclosed in wicker work armour to prevent possible seduction, but we could not linger, and soon moved on.

Almost as regular as clockwork, the sea breeze would hit us every morning at nine o'clock. Some days it would be so powerful that we could carry only a jib. The current was running along the coast with us at a rate of three or four knots at places, causing very dangerous seas. Rarely did

we sail at night, for the charts were bad, and it was unsafe. When we were off clean coasts we sometimes carried on at night with the scented land breeze. Otherwise we sought anchorage at sunset.

There are only half a dozen European settlements on the whole thousand miles of coast here, so we were really in the wilds. We never knew what we would find ashore and drank deeply of the uncertainty and expectation of it. At least I did, for I simply live on this sort of thing. Etera, however, began to feel the strain of it. He did not understand these people we came in contact with. Their weird adornments and fearsomely painted faces awed and somewhat frightened him.

'We are getting to the end of the earth,' he would say.
'No white men come here, nor are there my kind of people.

I want to go away from here.'

He began to be sulky and mutinous, and worried hist be meelf into a state of sickness with the most surprising syric to seiptoms. We put into a settlement where there was a docte devely. After the examination, the doctor and I agreed that the it wo wmptoms were unfounded but that it was a matter of ps vchology. We approached it as such, and Doctor Braun pro self a good psychologist. He explained to Etera th a very powerful medicine which would cure his sickness. He then produced an imposing bottle of l Etera to apply externally to the limbs. The eff miraculous. We had struck a happy chord. The m smelled exactly like something given him years ago for diving cramps. His cramps had vanished and he had imperishable faith in the medicine. After the first app tion the patient was considerably improved and in two dhe pronounced himself cured. The medicine was nothing more nor less than pure eucalyptus oil.

I wonder if you have ever seen a real tropical cockroach. They are more than two inches long, fly like birds, and I have seen men with the soles of their feet half eaten off in the night by these brown pests. Ours had not reached that stage yet but had been increasing rapidly. We had already rid the ship of them more than once but it is impossible to keep them off, for as soon as one lot was exterminated, a new batch would fly aboard, or come in with supplies. A rat came aboard for the first time when we were in Madang and we set a trap for him. During the night the trap went off with a bang, and I rejoiced. In the morning I found a large cockroach in the trap. He, and not the rat, had sprung it and got caught. This should give some idea as to the size of these insects.

After weeks of this interminable savage coast, I myself began to feel that we were almost at the end of the earth. I looked over my charts and began to feel horribly microscopic and unimportant and exceedingly far from home. It seemed quite impossible that we had come so far. The thousands of miles that lay ahead seemed for the moment appalling. Difficulties that lie far ahead often appear insuperable. Distance lends them an aura of awe. But as one progresses each step is studied and accomplished as an independent chore. Before one realizes, one has succeeded in a mpleting what seemed originally a colossal undertaking of the one long-sustained strenuous effort but rather by enected series of short efforts, each one a complete of the content of th

We had a rendezvous at the mouth of the Great Sepik River with Brigadier-General E. Wisdom, Administrator of the Mandated Territory. In his yacht Franklin he was making an inspection of the territory. He would ascend the Sepik River on this trip farther than he had ever done before.

I had been hearing more and more about the tribes of the Sepik and yearned to make this trip. Only with the help of General Wisdom would it have been possible. I am indebted to this fine old gentleman for one of the greatest adventures of my life.

We approached the mouth of this great stream on Saturday, August 9th. Three smoking active volcanoes were in sight all day — isolated cones sticking out of the sea. The low-lying Sepik land did not appear until we were close by. We came first to a wide band of yellow water indicating the mouth of the big Ramu River. Then more blue water and at last the absolutely distinct line of yellow of the Sepik. It is remarkable how the waters rush out to sea for miles without mixing with the ocean. There is a perfect line of demarcation as if a block of transparent blue glass were placed against a block of yellow wood. One can see, just before entering the yellow, several fathoms deep in the blue — noting the dirt and rubbish moving along at the line of contact.

We got Bam Island (what a name!) astern north-east and steered for the mouth of the river. The left bank was low, with small growth, but the right hand shore was graced by high casuarinas, looking like grown-up Christmas trees and decidedly out of place here. We battled the current to an anchorage off a native village just inside the entrance, making only a mile in just an hour under sail and power. Huge hornbills, herons, parrots, and many unknown birds flew all about, and perched in trees along the shore. Then a dozen long narrow canoes (paddled by standing naked black men) came out to meet us. The Franklin had not yet reached the river, so we were glad.

The men wore their hair, which was shaved far back from the forehead, in a long cylinder at the back of the head. The village ashore, perched on stilts with great projecting roofs, presented a scene of great activity.

The mighty river rushed past, gurgling along our planks. Although somewhat replete with natives who had become rather matter of fact, I had a feeling of expectancy, a thrill that was greater than I had experienced for long, and felt that we were on the eve of a great adventure. This unknown river of rivers, savage, in the wild Stone Age, surely holds romance for the most sophisticated of explorers.

After supper, the full yellow moon rising over the quiet river induced me to play a sentimental record on the gramophone. But when it was finished the drums had started on shore, so much more in keeping with the surroundings that I closed my paltry little music-machine to go on deck and listen to the throbbing heart of this turbid stream.

The sing-song ashore lasted all night. The everlasting drumming seemed to penetrate and take charge of the

soundest sleep.

Etera betook himself early on a hunting trip and returned later in the morning with three peculiar birds, one a huge thing like a grey-brown stork, another golden hued bird that started out to be a hawk but got side-tracked somewhere, and a species of pigeon coloured in blues and greens like a parrot. We kept the stork and gave the others to the guide. The bird was very good eating—like chicken but with dark-coloured meat.

Islands floated by, and vast quantities of rubbish. I went on deck, and lo and behold there was a nice little island fully equipped with trees, bushes, birds and everything, moored ten feet from Svaap where there was open water before. I later learned of an interesting custom of certain Sepik tribes. They solved the problem of crop rotation in a most unique manner. They simply catch a floating island in the spring and plant their yams on it. When the crop has been dug and the usefulness of the island is past, they cut it loose and it continues its voyage down to the sea. Next season they can snare a new piece of real estate with virgin soil.

On August 11th there was still no Franklin. Then just

as we had given the Administrator up for lost, smoke appeared on the horizon. The Franklin steamed in, a beautiful sight, and anchored close by. Half an hour later we were fast to the end of her 12-inch hawser and she steamed off up-stream with us in tow. We rushed on faster than Svaap had ever travelled before, past mile after mile of sak sak trees and flat low land. We were on our way into the heart of the great dark island at last.

The graceful clipper-bowed steam yacht Franklin, 181 feet over all and drawing 13 feet of water with a displacement of 370 tons now became my home for some length of t me. Svaap was left at Marienberg, a day's run up the Sepik. With her small auxiliary power it would have been almost impossible to have ascended the river in her against the strong current.

The great yellow river, winding its tortuous way for several hundred miles into the heart of one of the world's least known regions, is navigable for three or four hundred miles ordinarily, running mainly through the Mandated Territory of New Guinea (formerly German New Guinea) but finding its source in Dutch territory. The Administrator planned to go all the way up to the Dutch border, making contact wherever possible with the savages.

We found the river at a very low stage and were forced to leave the *Franklin* about two hundred miles up, going on in a small boat with a few native police. The whole trip, in the *Franklin* and later in the small boat, was of the most intense interest to me for we were really pioneering.

At Marienberg, about thirty-five miles up from the mouth of the river, there is a government post with two or three white men, and the only missionary on the river — Father Kirschbaum, the finest man in this work that I have met anywhere.

At Ambunti, about two hundred and thirty miles up, is a lonely little government post under District Officer Eric Robinson, a clean-cut young Australian who has a handful of bushy-haired native police-boys to help him persuade the surrounding tribes to exert their energies in other directions than that of head-hunting. There is no other white man in the whole length of the river.

As to native population one can only say that the Sepik region is inhabited by countless thousands of natives still in the Stone Age, varying from the grass-skirted and loin-clothed inhabitants of the lower river, to the stark naked primitives of the upper river, and the tribes near the Dutch border where the men wear a pubic shell or a conical basketwork box. One finds amazingly varied cultures among the different tribes: a pottery culture at Aibom and Chambri on an unnamed upper river tributary, a painting culture on a lower river branch, basketry here, and fine carving there.

For nearly two hundred miles the river flows mysteriously through low flat country consisting mostly of sak sak swamps which supply the main article of food, and mile after mile of pit pit (long grass). Then comes a gradual change and although the banks are still lined by pit pit the land is higher and a few yards back the tall trees begin. The mountains appear ahead when you go beyond two hundred miles and soon you are winding through rolling blue hills with wide lagoons stretching off among them. This upper river is a beautiful thing.

And so for days we explored the greater river. In the Franklin we were forced to sound our way painfully along due to the exceedingly low state of the water. There are no charts of the river, and in any case the channel is continually shifting. At times we ran aground and wasted valuable time heaving and straining on cables. Once for two days we lay on a mud bank, and only after we had almost given up hope of getting her off at all the river suddenly rose several feet and we were free. The river is like that: it may rise even fifteen or twenty feet in as many hours, or on the

other hand you may find yourself suddenly stranded, due to an unexpected drop in level. The terrific rains in the mountains account for this. The south-east trade-winds blowing home against the bulk of New Guinea strike the mountains, rise and cool and precipitate their moisture in such volume that it is estimated that more rain falls here than in any other part of the world, probably forty to fifty feet per year.

Slowly we made our way up the great river, stopping at practically every village and exploring several of the previously unknown tributaries. Everywhere the natives were friendly and usually willing to trade. I have a wonderful collection of primitive implements from this region, most of them being purely Stone Age. We found a very interesting trade among the natives themselves on the river. Coast tribes and interior tribes are enemies, but they have commodities necessary to each other. Far up one tributary is a tribe which makes the pottery for the river. Another makes the sleeping baskets. A third makes quantities of sak sak,* the food of the whole river.

The coastal people make shell ornaments. You will find these ornaments five hundred miles up river and pottery finds its way to the coast. Many intermediaries are necessary in this primitive trade, but the system works, even though the producers may be mortal enemies of the consumers.

We were always preceded by the news and found the natives gathered in a state of excitement in the villages. The great drums boomed out their message through the wilderness and from miles around came the savages — fantastically arrayed in war-paint, elaborate head-dresses, and ornaments that defy description.

They were all head-hunters, these people, but we went among them with hardly a sign of antagonism. They have

^{*} Sak sak is a sort of meal made from the pulp of a tree. In the form of a pudding it is the basis of the Sepik diet.

had practically no contact with white men and still regard them with awe and curiosity.

But I do remember feeling a peculiar chill once, when in an upper river long-house an old warrior insisted on making a close comparison of my hair and the shape of my head with that of a head he had only recently separated from its unfortunate owner. He held the gruesome object close, ran his fingers through its hair and then through mine — and with expert fingers that would have done credit to a phrenologist he compared the shapes and various bumps of the two skulls. I was considerably relieved when the inspection was over — although I had no mind to deter the man in his scientific comparison.

They have a remarkable process for captured heads on the Sepik. Unlike the head-hunters of the Amazon, who remove the skull and shrink the heads to a miniature size, retaining the features, the Sepik people work with the skull itself. They place it in the earth where the insects clean it perfectly. Then by building up the skull with clay they reconstruct the features, using shells for eyes and attaching real hair. The result is an astonishingly life-like head, which is grotesquely painted just as the men themselves do upon occasion. These built-up heads are considered very valuable possessions among the Sepik people.

We watched a thousand naked warriors dance all night by torchlight in an orgy of ceaseless abandon. They continued for three days and nights, dropping in their tracks when exhausted, but joining in again later on. We saw great dugouts come sweeping down-stream propelled by sixty erect blacks paddling with a rhythmic stroke that nearly lifted the craft from the water. Great men's houses two hundred feet long on elaborately carved posts, immense drums, huge air-tight sleeping baskets into which the whole family and live stock retire at night to escape clouds of mosquitoes and insects that would otherwise make sleep

impossible, weird savage ceremonies and initiation rites — a thousand things combined to shout at me that this was the greatest adventure of my life. Twentieth Century? Perhaps. But life here, in the interior of this vast dark island, is in the Stone Age. A few miles away from that brave government outpost, tribes at war with each other. A man is not a man and cannot win his woman, unless he has taken an enemy head. The secrets of the wilderness are still safe from the conquering white man.

I was loath to leave all this, but the weeks were slipping by. If we delayed much longer we would never make Singapore, for the change of monsoon would find us still in the East Indies and that would be disastrous. As it was we still had the south-east with us for about two months if we were lucky. On August 29th we said farewell to the Franklin and once more headed west along the north coast

of New Guinea.

Hollandia, less than two hundred miles along the coast and in Dutch territory, was said to be the headquarters for the region. This and Menukwari (situated almost at the western extremity of the island) were the only settlements on the north coast of Dutch New Guinea. We had been out of touch with mails for half a year, and were practically out of funds and supplies. Therefore we were very anxious to get to Hollandia where there were banks and stores. The wind came in from the north-west to make it a beat along the coast during the day, but at night the lovely-scented land breeze came off to help us on the way. At sunset on the fourth day we were at last entering Hollandia Bay and heaved a sigh of relief.

One of the greatest surprises imaginable awaited us here for we found a deserted town. Not a single white marremained. Our hope of replenishing the exchequer and store lockers were blasted. It is another ghost-town like Morobe





Top: A Balinese Market Bottom: A Sepik head-hunter

with only its lurid bird of paradise past to live on — when money flowed and fortunes were made in gorgeous feathery gold. But unlike Morobe, it was inhabited by a strange mélange of Orientals and Island races. It was a mixing pot, the frontier between the East and the Islands, and I saw queer hybrid types that reminded me of certain Polynesians I had known, of Chinamen in Tahiti, of pretty Malay girls.

Hollandia is the one place in the world where the old German empire still exerts its influence, the old currency—one, two, three, and five mark pieces—being used interchangeably with English, Australian, and Netherlands coins. As a matter of fact the German coins are by far in the majority as I discovered by examining the cash drawer with the old Chinese trader. He saw nothing unusual in buying and selling with coins of a monarchy defunct since 1918. With exactly eleven shillings and twopence left we hastened on to Menukwari—four hundred and thirty-six miles away, but the only other possible source of funds and supplies on the coast.

This towering rock-bound coast is one of the most spectacular in the world. We had already left seven hundred miles of mountainous coastline behind us and it seemed as if it must go on for ever. Now, as we progressed still farther west, the mountains seemed to climb still higher and nearer the sea. What a coast! Ridge upon ridge, ridge upon ridge, never-ending ridges of jagged mountains descending to the sea in serrated ranks as far as eye can see. Peaks in the clouds and flanks in the sea. Slender waterfalls high above the valleys looked like silvery ribbons from the yacht. Actually they must have been tremendous falls with a great

volume of water tumbling hundreds of feet.

Once we came upon a fleet of native canoes ten miles offshore. From the amazement registered by these natives they are certainly unaccustomed to seeing a vessel on this coast. We stopped and bartered for fresh fish, obtaining

three large ones of unknown species for a package of loose tobacco and two boxes of matches. From this unique roadhouse we also obtained cool drinks — coco-nuts — which we drained eagerly. Occasionally we passed great floating forest trees — always a danger on this coast — drifting westward with the coastal current which prevails during the easterly monsoon. They had come from the Sepik.

One day we sailed right off the chart into a void, of which we had only an ancient Dutch sketch map, borrowed at Alexishaven. This section of the coast is uncharted at the present time, but as the Dutch survey by the *Tydeman* (which we met) is now nearing completion there will be

a chart shortly.

We passed the mouth of the Mambarambo — next in size to the great Sepik among the rivers of the north coast, but did not know it until we ran into the mud of its bar which extends five miles offshore. The coastal current had set us far ahead of our reckoning. Without this current we would have had a hard time making any progress, for we had continuous baffling head winds. By staying close to shore we were able to benefit by the land breeze at night and thus progressed slowly. You will find that almost anywhere you go, if you are near large land masses and going to windward, you will be able to work the land breeze at night to great advantage. As it only extends four or five miles from shore you have to stay close in and could not do it on foul coasts.

On September 6th the current took us in hand and changed our route during the night by setting us way up to the Padaido Islands which were in sight at sunrise. I had particularly laid a course via Japen to avoid these uncharted islands and reefs. Now, in order to pass the group by daylight, we were forced to start the engine and burn some of our carefully hoarded petrol, only a few gallons of which remained. The islands were more

numerous than shown on the chart and quite different. By five o'clock that day were we safely past the maze of islands and reefs with clear going ahead.

It was an afternoon of unequalled beauty, for the artist at least, if not for the sailor. The surface of Japen Strait resembled a great mirror, and the jumbled-up array of little islets seemed blue as the water, with big, bulky, mountainous Japen towering on the other side, also blue. Its peaks were wrapped in motionless blue-white clouds. And clouds lay piled in grotesque shapes all about and overhead, with their counterparts in the water so that it was hard to tell which was which. Everything was a symphony in blue—blues of all shades—no other colour. Our wake disturbed the glass of the surface for a moment and then all was as before.

It was a dream-world, but more mystic and lovely than even a dream could construct. Out of this glassy surface rose flying-fish from beneath our bow, and flew for hundreds of yards, again refuting those learned scientists who claim these fish can only glide or soar, or regain momentum by momentary contact with the water. The total calm eliminated the first possibility and the glass-like surface of the water could have betrayed any contact with the fish. In the distance, isles took on fantastic shapes and hung silent in the sky in mirage. Sunset was the height of splendour, and the unbroken sheet of sapphire became bronze, and then silver as the almost full moon took over the duties of the sun.

We came to Menukwari on September 8th after a night's run under power. Our supplies had dwindled to a few native sweet potatoes, some rice, and one tin of beef, so it was high time we got somewhere. It was a beautiful approach, the high mountains just tinged with gold from the rising sun, little palm-tree islands all littered with native villages, and Cape Memori to starboard. There was a narrow

entrance between the cape and Mansinam Island, where glistening bronze figures were pearl-diving from canoes. Then we followed close to shore, past village and mission station and a radio house, turned to the right, and suddenly there lay Menukwari — a thick cluster of tin-roofed buildings and a few craft, one a huge double-ended canoe housed over, and a Papuan lakatoi. Strange mixtures of smells came forth to greet us: flowers, the beach, copra, smoke and cooking breakfasts. The water was crystal and we watched our anchor go down and down and land on white sand among small coral clumps in seven fathoms.

We had been surprised at what we had found (rather what we had not found) in Hollandia, but when we had gone ashore in Menukwari we were dumbfounded. The centre of commerce of the town was conducted by three coarse whites, the leader appearing to be German. Apparently he believes the war is still on for he received me in a very ugly manner; 'no son of a bitch of an American is going to get any help here,' he spat out venomously, 'so you might as well get out.'

The use of the radio was refused me so that I could not cable for money as I had planned. The Dutch resident, who would have changed matters quickly, had gone a few days previously to bring his wife, who was very sick, to Amboina and medical attention.

We were at a loss as to what to do. At length we took our eleven shillings to a Chinese storekeeper and acquired some kerosene and four tins of beef. The white men had even refused to accept our English money which is good anywhere on the coast.

So we set out from Menukwari on what proved to be a fifteen-hundred-mile voyage with not a cent aboard and food enough for two days. We had to go back to nature. For days we sailed, and lived off the land and sea. We caught fish. We went ashore on uninhabited islands and shot wild boar and sometimes birds. We found coco-nuts. When we saw a few natives on an island we went ashore and bartered old clothes, fish-hooks, and trinkets for a few vegetables. A continued spell of heavy south-east trade-wind prevented us from beating up to Amboina. At length we found a solitary Dutchman on the island of Buru who guaranteed our credit with a Chinese trader for some supplies which we settled for by mail when we reached Java. We sailed off again and for several weeks were out of touch with civilization, finally reaching Bali and Java where funds and supplies awaited.

This surprising reception at Menukwari was a unique experience. Only one other time in three and a-half years of cruising and 32,000 miles of travel did we run into white men of this calibre. The other occasion was in Cochin, a small port on the Malabar coast of India. My faith in human nature has not been hurt by our experience which naturally has included men of all stations in life under every possible combination of circumstances. On the contrary, I have found human nature on the whole far better than it is reputed to be. We have been given every possible assistance almost invariably, have been accorded a thousand little unexpected courtesies, and have left a host of friends behind. Now that the voyage is finished the memory of a rare encounter such as that in Menukwari only serves to emphasize the kindliness which we met with almost constantly. One of the richest rewards of the whole trip is the memory of the world-wide associations, the happy contacts we have made. I am for ever saved from becoming a cynic. I prefer to look for, and therefore find, the beautiful in life and not the sordid.

Squeezing mile after painful mile out of irregular land and sea breezes we progressed. Ahead, its awesome reputation lying heavily upon us, lay Sagewin Strait: a twentyfive-mile sluiceway only a mile wide, through which the tides rush and return. We expected a struggle but ached to get there. Once through, we could say farewell to New Guinea and meet the trade-wind once more.

Finally, on September 12th, we were in sight of the strait. The breeze, intent upon baffling us, went dead ahead. An hour and a-half after noon I decided that it was now or never — and started the Kermath on the last few gallons of fuel that I had saved for the strait. We were making our last effort to clear ourselves from New Guinea which seemed to have entangled us in her meshes for good. At last we crept out from the lee of Cape Sorong, the north-west end of the great island, and there encountered a heavy southerly which drove us through a wicked sea across Sele Strait so that we arrived near the entrance to Sagewin at dark. The moon rose just in time to light the strait which is deep throughout with no dangers, other than currents.

The following day found us in a new world, surrounded on all sides by the Molucca Islands. We had passed through the gateway between the East and the West. A great load was lifted from our shoulders. The gods of the strait had been kind, although at times we had progressed very like a man climbing a slippery winter hill, losing two feet for every three gained. Neptune would seem to grip our keel and tug us astern, suddenly letting go so that we would shoot forward with renewed speed. At times powerful whirl-pools threw us one way and another, the boat bounding from side to side as if under heavy blows. But the shores crept past gradually, until at last we emerged into Eastern waters.

Foraging ashore and fishing from Svaap kept us in food and a day or so later we entered the Ceram Sea accompanied by three small fishes which seemed intent upon making the passage to Java with us. We first noticed them after leaving the Sepik. Their regular haunt was in the propeller

gap by the rudder, but sometimes when there were no dangerous large fish about they ventured out along the hull and even under our bow, seeking the shade when the sun was hot. Always, when other fish appeared, they fled to their home by the rudder. They were only about four inches long and had a prodigious time keeping up with us. I wondered often when they slept or rested.

Speaking of fish, about this time we began to feel as if we might at any moment turn into a pair of them ourselves, or more possibly into yams. For nearly a month now we had subsisted largely on yams, fish, and hard biscuits, with an occasional change when we were lucky in our hunting or bartering expeditions ashore. While the limes had lasted it had been all right — but now we felt a desire for something acid-sweet. Of all the various fruits of the South Pacific region the little round indigenous lime is probably the most valuable to the cruising man. Available almost everywhere in the islands it keeps three weeks or more and provides a refreshing drink that seems to make up for the lack of other luxuries. Unfortunately the islands about us now had no fruits whatever and we went without.

One night we entered Buru Strait, quite unprepared for what lay in wait. We advanced to a point abeam Keland Island and then at the beginning of my watch at one in the morning a distant moan became noticeable, growing quickly into a full throated roar. We were struck by the most wicked tidal bore I have ever encountered in a small craft, and for nearly six hours we were at its mercy. We were thrown miles out to sea, battered back and forth like a shuttlecock, and spun in circles out of control until sunrise when, more or less in desperation, I threw on the engine full speed and with the last remnant of fuel drove her at right angles to the main current toward the eastern shore of the strait — hoping there to be somewhat out of this fury of waters.

The wind came in ahead and we started a futile beat

toward Amboina, only seventy-five miles away but representing infinity to us. There banks, supplies, friends—everything that we needed so much—beckoned to us and we could not respond. Finally, with a constantly rising barometer, which can mean only one thing here—a heavy southerly of several days' duration—we gave up and ran for Buru and shelter.

For thirty miles we drove Svaap as she has rarely been driven — half a gale on her beam — and never once in all that time did her lee rail appear above the turmoil of water. I fully expected the mainsail, which was getting weak, to explode at any moment but it was all or nothing. Without a powerful drive we could not force a way through the tumbling rushing cross seas. We made Kayeli Bay just before night.

Off the village at the southern end lay a weird box-like craft loaded with bamboo and Hindus. We anchored next to her and I at once got ashore in the canoe to see the Dutch Official, who according to the Pilot Book, was stationed here. There was no white man in the place, nor a single soul who could understand me. Chinamen, Arabs, Indians, and Hindus of all sorts — a motley crowd in flowing sarongs.

With my 'Malay Self Taught' I extracted scraps of information from the entire population — that is the male portion, for the women were invisible — as we gathered in the larger of the Chinese stores. As many as could crowded in. The rest packed and jammed about windows and doors with a considerable overflow extending out among the coconuts. I sat on a keg and looked up words in the vocabulary.

There was actually a Dutch resident at Namlea, they said, and told me that this was only three or four miles across the bay. Being nearly starved and having used our last drop of fuel we more or less confiscated the only tin of petrol in the place and all the eggs, a tin of butter, and some queer Hindu cake. These were the only edibles available, for they

live almost entirely on rice and fish. Again I marvelled at the lowly Chinese storekeeper, ever willing to help and trust.

So next morning — after having sailed (it seemed) all over the East Indies in search of a bit of civilization, we crossed the sheltered bay, negotiated a tortuous entrance channel with the help of the Chinese storekeeper and an Arab who went with us, and anchored in a little reef-girt basin off the village of Namlea.

We rested here three days and the government resident, G. V. Wieren, arranged our credit with the leading Chinese and proceeded to show us Buru. We dashed about in a tumult of tooting in one of the several American cars the island boasted. We watched cajuput oil distillation (the principal industry of Buru) and we learned the mysteries of the opium trade which in the Dutch islands is a government monopoly. It is manufactured by them and sold in two sizes of lead tubes about as large as .22 and .38 cartridges and costing respectively about 25c and 6oc in American money. It is sold only to the Chinese, and every village of any size has its store. On the last day I went with the Resident on a judicial and tax-collecting tour of the island and was richly rewarded by countless amusing scenes, roadside court sessions, a ceremonial opening of a new bridge which included the sacrifice of a goat amidst fanatical sword dances and Oriental music, and much more. As we tore along dignified Chinese would steer sedately off the road and fall resignedly into the bushes from their bicycles. They have no idea of steering it seems, nor of a more stately descent from their vehicle. At dinner with a very cultured Chinese family we were served with countless strange dishes by dainty, dimpled Chinese maidens, with gleaming black eyes and hair, dressed in flowered silks.

When it seemed the gale had blown itself out we sailed from Buru for the Timor-Java chain of islands. The weather drove us to shelter again in another bay in Buru but at last we made the island of Ambelau, reputed to be overflowing with wild boar. The rajah, a cross-eyed little Mohammedan, told me that they invaded the village at dusk in squadrons. So we established ourselves in his back yard twenty feet from a hole in the fence through which wild boars entered each night. We were comfortably seated in chairs, I with my rifle across my knees. We remained seated for some two hours and watched the chickens go to roost in the trees, and the parrots and a hundred other kind of birds retire amid various clamorous noises. Then the little lizards started their evening mating song, and a monotonous dirge-like moaning came from the mosque. It grew darker and darker and at last, when it was obvious that we were wasting time, we returned to the crowd on the beach where, after a good deal of gesticulating and sign language, I procured an ancient red rooster and went aboard pigless. Later, in my berth, I suddenly realized what a ludicrous idea it had been - trusting a Mohammedan, to whom pig is forbidden, to help you hunt said pig.

Three days later, in the middle of the Banda Sea, we met with a strange phenomenon. For a half hour we had been conscious of a growing rumble like a distant waterfall, and then were hit by a vicious tidal wave travelling westward at the rate of about two to three miles an hour. It consisted of a half-mile-wide belt of heavily breaking seas, like seas on a reef, and extended out of sight to north and south. It threw us about violently for a time and passed on to the west. Two hours later it was followed by another, somewhat weaker. This was puzzling, for it was not a tidal interval although I supposed the extraordinary manifestation to be of that origin. One is utterly confounded in this vicinity by tidal bores, unexpected currents, and seas alternately calm and confused for no obvious reason. It all seems quite mad to the stranger although the local navigators may understand

understand

We reached the islands and gradually worked our way westward. Only a few miles off the coasts we were forced to navigate by sun and stars, for the islands were swallowed up by a haze which prevails here due to the minute dust particles from the Australian plains. We passed close enough to the volcanic rock of Komba to see lava flowing down its precipitous reddish slopes and smoke pouring from several fissures. At times we navigated largely by intuition — for the currents were always doing strange things with us. We were now in the Java Sea. Over there, across the islands, lay the Indian Ocean. Around each island the waters of the two seas carried on an unceasing warfare one with the other.

The deplorable poverty aboard ship was becoming quite amusing. As a result of our prolonged voyage away from civilization we were reduced to one fork and one spoon for our supply of cutlery. The can-opener broke one day and since then the only surviving knife - an old saw edge stainless steel thing - had done duty in this and many other lines. Then this old faithful implement went overboard while Etera was cleaning our forlorn seasick rooster for dinner. As a result we were presented with the amusing spectacle of my Tahitian glumly opening tins with the axe, and solemnly paring yams with the same instrument. Had the axe been lost ... well, there was always the stillson wrench.

Had the racing fraternity at home seen the way we conducted spinnaker drill at all hours of day and night they would have been edified. Breezes north of east in trade-wind regions vary back and forth constantly, contrary to those south of east which hold force and direction more steadily. As we were having north-east breezes mostly, with courses varying about south-west, we were constantly shifting main and spinnaker from port to starboard and back. At one in the morning the spinnaker would be shifted to port, and at daybreak it would have to come back again. We had only

one spinnaker now, or we would have been using the wonderful arrangement of double spinnaker which we discovered long ago. The squaresail had gone to its reward.

Thus we progressed, taking advantage of every fluke and flaw. The fever was in us to get to Java, for the moment our Promised Land. Each mile brought us nearer to a seven months' collection of mail. In all this time we had not heard from home or the outside world.

IT was Sunday, the 28th of September. We approached Komodo, habitat of the great carnivorous dragon-lizards: impossible dinosaur-like monsters that exist only here in all the world. I had come half the circumference of the globe to see them. On a turquoise sea among islands of golden gauze we sailed. Then across Linta Strait with nothing worse than a sullen heave and jerk of its surface instead of the fury of rips and whirlpools and dangerous breaking seas that we had expected. Patting ourselves on the back for having escaped the malevolence of Linta, we rounded the northern side of Komodo. With its scorched and multicoloured volcanic crags and landslides it reminded me of the Galapagos.

Suddenly we plunged into a white fury of foaming, crashing waters — the mouth of Sape Strait which scours the coast of Komodo on the west. For a mile we were forced to navigate this wild reach, to get to our harbour on the western side of the island. As the current was with us we were cast along from sea to sea like a cork in violently boiling water, shooting by the cliffs so fast that we could hardly take time to glance at them. The noise of the waters was astonishing. When we came to the bay we were literally flung into it bodily and soon were in quiet water. Dodging reefs, we worked up to the very head of the bay where we anchored. A wooded gorge ran up to the hills from our beach, with great Gubbong palms, here and there red cliffs and ridges all about. Imaginative, unreal, it was a perfect setting for the dragons.

There is, I have read, a convict settlement somewhere on the island of Komodo. We failed to find it, or for that matter any sign of human habitation. The island was simply alive with wild pig, deer, and bird life, while although signs of the fantastic dragon-lizard abounded we almost gave up hope of coming face to face with it. We hunted wild pig and put out the carcases as bait. We watched from a shelter of bushes for hours and saw nothing. But returning to the spot after sleeping we would find that the Varanus (dragonlizard) had been there and devoured the whole thing head, tusks, hide and all - leaving only a grease spot. We would lose the tracks in the dense underbrush of a valley or in a patch of jungle and return disappointed.

We had a barbecue one day, Etera cooking a wild boar and some vegetables in the approved Tahitian manner. We dug a hole in the sandy beach and built a good fire in it. Stones were piled on top and when they were red hot and the fire dying out we put in the meat and vegetables. Then plenty of big leaves went over the food, after which the whole thing was covered with a heap of sand to keep in all. the heat and steam. It could then be left for several hours, so I went off to track Varanus.

I returned at dusk from an exhausting, broiling march. There was no sign of Etera. Guessing that he had returned to the scene of the killing, a half mile up our valley, to see if any of the animals had come to feed on the entrails, I started in to find him. He was not there.

Suddenly a shot snapped out near by - then an interval of silence followed by three more shots in rapid succession. I had dropped prone during the shots and then rose to whistle for a reply. None came. I was becoming anxious now as it was almost dark. Thoughts of the Varanus and of the wild buffalo flashed through my mind. After considerable calling and searching in the vicinity of the tumult I came upon a clearing, and there - very cautiously descending from a near-by tree, gun in hand - was my missing crew.

It seems he had come upon a wild boar and his family. Being desirous of killing a young one he had stalked them. Evidently he considered that one whole barbecued boar was insufficient for two men. The female and young scented the intruder and fled, but the valourous male, with bared tusks and upright mane, had stood ground. Etera, becoming excited, had fired and the boar had charged. Thus the retreat to the nearest tree. I am surprised at the presence of mind that he showed in taking the gun with him. From his vantage point he had commenced a bombardment with trembling hand and evidently the wounded boar had wearied of the attack and retired.

The moon rose and we sat on the sand waiting for our nature-oven to do its work, enchanted by the beauty of the scene presented by the silver bay with its framing of grotesque black crags. When the time was up we opened our steaming cook-hole and transported the contents aboard, resisting the tantalizing odour for the moment. And then the feast!

Have you ever been confronted with an entire cooked boar — free to start in where you will? It was almost too much, that decision, but at last I shut my eyes and made a grab, bringing forth a huge slab — actually six ribs plus all near-by tissue. We sat on deck in the moonlight, tearing off great hunks of delicious meat with fingers and teeth. The silver light exaggerated the weirdness of the setting, and queer animal and bird noises came from land. Living dragons transported themselves within hearing. The struggle for existence followed its natural cruel course. Surely we were two hairy cave men who had just been successful in the hunt; our fingers were slippery with hot grease that ran from the just-cooked carcase; our teeth tore through crisp burnt edges that had touched the hot stones. Momentarily we forgot our aching legs, unused to this strenuous life. My hand touched my cheek — it was hairy, a month of it

now — and so the picture was complete: two hungry savages who must devour their meat and sleep in order to hunt the dinosaur on the morrow.

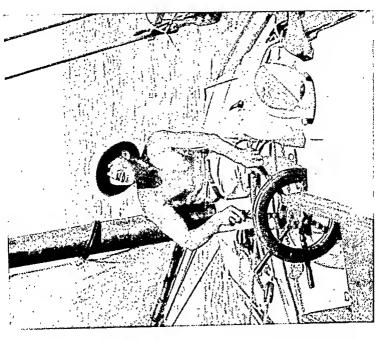
The streams and water holes of Komodo were all dry: and our tank was almost empty. So we had to leave sooner than we wished. On the last day I climbed the highest mountain of Komodo. The magnificent view and cooler air on top partially rewarded me for the heart-breaking climb that any respectable mountain goat would have refused. I learned that day what thirst can be — the craving that maddens — for the terrific heat reflected from burnt slopes, shale, and lava was worse than anything I have ever encountered.

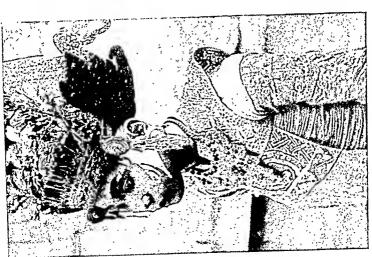
Returning late by moonlight I followed the pig and deer trails through the bush, and sometimes the dust-dry river beds, and later reached the vicinity of our big bait boar. Somewhat lost, I searched for the spot, suddenly becoming aware of a strong odour. The whole place is so alive with pigs and deer that the valley smells like a stockyard. But this was another smell. Putting it down to the ripening carcase of the bait I followed it to sit and watch a bit for Varanus. Then I remembered reading of the peculiar odour emitted by the dragons, and at the same instant realized that this was no smell of dead boar — but something alive, something strange to my senses.

I stood stock still, but heard nothing. Creeping on I reached the sandy hollow of a dry creek bed and quietly peered through the brush to receive the shock of my life.

There — monstrous in the moonlight — was a giant dragon-lizard, towering twice my own height above me. My reason told me that it was Varanus, but my imagination (and it was by far the stronger at the moment) told me differently. It said in a voice that pounded in my brain that I was not in the twentieth century but back in the dim primeval ages. I was staring forth at a monster dinosaur.

He was suspicious, standing way up on his hind legs and





resting on his long scaly tail. He swayed a bit back and forth. Evidently he had already devoured the boar, for his belly was like a huge distended balloon. I did not breathe, but he was aware of my presence. Suddenly, while the moonlight reflected from his scales in fantastic design, he whirled with lightning speed and disappeared into the black of the jungle. But my visit to Komodo was complete. This was too much a climax to remain longer. It was the impression I wished to keep for always. For a brief few minutes I had lived in a prehistoric era and had felt the thrill and fear that the cave man felt when facing those great monsters of old.

We sailed from Komodo at the hour of midnight.

For nearly a year we had been sailing deserted seas.

Weeks, sometimes months, went by with never a sight of sail or ship. Among the island groups of the western South Pacific there were naturally native sailing canoes, and at rare intervals a small island steamer. That was all. But the morning after leaving the island of Komodo in the Dutch Indies we suddenly found ourselves no longer alone.

The Flores Sea was dotted with sails in all directions. Praus from Celébes, Bugis boats with their curious tripod masts, cutters and ketches, and even a junk or two from the China Sea shared the fast failing south-east monsoon with us. September is really the last month of this wind, and already it was October. Each day the breeze grew weaker. We would have to hurry to reach Singapore in November, for we were a thousand miles away. It was quite imperative to accomplish this, for otherwise we would be caught too soon by the north-east monsoon. This was the wind we wanted for the crossing of the Indian Ocean, for to make this passage in the opposite or south-west monsoon would be folly. But we had to complete the northbound voyage to Singapore before the north-east was established, or it would be a difficult run. As the north-east could be expected any time in December we did not have much more than a month left.

We reached and coasted along the shores of Sumbawa looking for a place to water. Our tank ran dry for we had failed to find even a trace of moisture on Komodo. At Ree Point near the north-western end of Sumbawa there was a place, according to the East Indies Pilot, where a 'small stream discharges and the water is always good'. We found

he place and anchored close to three Celebes praus with great high poops. They looked for all the world like the hips in which Columbus crossed the Atlantic. A fine bridge narked the river — but underneath it lay a parched, empty ped of sand and stones.

The captain of the largest prau, a fine genial Malay, acrificed some of his water supply to help us, and we sailed soon after. It was only fifteen gallons of liquid mud, brackish at that, but it would at least bring us Bali. The same night we reached Lombok and watched the sunset solours play on the great peak of Rinjani, 12,352 feet high. These are magnificent islands, each new one seeming to sower higher than the last. The Dutch have good reason to be proud of their empire in the east, for the islands are among the finest and richest in the world.

On October 3rd, 1930, we at last reached Bali which and always been one of the main objectives of the voyage. We sailed in out of a primitive world — for we had not yet shaken off the spell of savagery that had clung to us for months. Head-hunting, cannibalism, sorcery, Stone Age cultures, the lusts and fears, lives and deaths and struggle for existence of the most primitive peoples of the world of co-day had been our normal environment for so long that we seemed but an isolated atom from another vague world. We dropped our anchor behind a tiny island off Temukkus—a village of the north coast of Bali—and I found myself aglow with excitement.

For several weeks I lived a dream. It was a rather blurred dream, the memory of which brings a rush of warm pleasure to me and visions of a race of beautiful people living only for the beautiful things in life and for their splendid religion, which has given them arts unequalled: temple-building, sculpture, painting, music, dancing, drama – everything beautiful and nothing commonplace. The very life of every Balinese seems to be an expression of art,

but above all there is a contentment and beauty of soul that fills one with envy. One leaves in a daze with a kaleidoscope of impressions: of the mountain Kintamani standing guard over the island's marvellously terraced and irrigated rice fields, of little walled-in villages and roadside shrines, of processions of beautiful girls carrying temple offerings upon graceful heads, of busy markets where such exotic foods as dragon-flies and unhatched bees are sold, of tiny girls of three being taught the first dance gestures by their sisters of five or six years. I had to end the dream one day — to carry on with the voyage. But some day I am going back.

Most long voyages in small yachts seem to be continually marred by crew troubles. Extended cruising by two or more amateurs seems invariably to lead to trouble, while the same things seems to occur when the owner sails with a paid crew of two or more as in the case of Muhlhauser. I thought that I had solved the problem by having only Etera on board with me. Our planes of existence were so entirely different that we could live in the difficult intimacy necessitated by such a voyage without the unfortunate friction that usually results. Thus for considerably more than a year. things had run more or less smoothly aboard Svaap. Although I deserted the ship for two or three weeks to stay in South Bali I never dreamed that Etera would not hold the fort during my absence. So when I did return to the north, ready to sail for Java, I was quite unprepared. for what awaited.

The first intimation that all was not well came when I returned to Buleleng, the port of the north. By motor this was a half hour from Temukkus where I had left Svaap and Etera. As I crossed the little square in the centre of the town I was confronted by a pigtailed Chinaman who waved in my face a sheet of dirty paper covered with mysterious Oriental hieroglyphics. Underneath—not so mysterious—was a numerical figure followed by the word 'gulders'. All this

conveyed nothing to me, but then my eye reached the very bottom and fell upon what was there written: 'Yak Svaap'. I recognized the scrawl as being Etera's — learned in a district school in Tahiti.

Just then a second Chinaman arrived brandishing a similar formidable looking paper. A crowd started to collect, as crowds will, whether on Broadway, in Batavia, Port Said, or even in a desert oasis in Arabia, as I later learned to my sorrow. It is the way of crowds.

I had already commenced a dignified retreat — but at the arrival of Chinaman No. 5 I went into full flight and sought shelter at police headquarters. A great light was starting to dawn.

This was verified by a quick conference with the chief of police and the leading Chinaman through the medium of an interpreter.

It seems that my resourceful Tahitian had gone on the loose in my absence. Deserting Svaap he had taken up residence in one of the small Chinese cafés, of doubtful reputation. Knowing not a word of any language spoken in Buleleng he had obtained unlimited credit by the simple expedient of signing 'Yak Svaap', yak being the nearest he could come to yacht. For two weeks he had shone. The loafers and idlers had flocked around him as flies to syrup, and one and all had been treated to liquid refreshment. The bill was always guaranteed by 'Yak Svaap'.

A courier sent by the chief returned with the news that my crew could not be found! He had last been seen in the café the previous night. I climbed into the sergeant's side-car and we embarked on a search of the town. The officer unerringly headed for the 'district' and there we ran across the trail of the wanderer. We learned at the very first house that he had been there the previous night — only a few moments though, for he had had no money. From there we followed the trail from one brothel to another and at last lost

it for good. In none had he remained more than a very short time. This is evidently one industry which is conducted on a purely pay in advance basis. They evidently knew their sailors too well to be fooled by this 'Yak Svaap' business.

'And besides,' said one of the girls, a rather nice look-

ing Malay, 'he was altogether too awful looking.'

There was a limit to all things.

A week later I sailed for Java. The police had combed the island fruitlessly. We concluded that Etera had stowed away aboard a ship so I looked for a new crew. The police absolved me of responsibility for the debts — blaming the Chinese for having led him on. The only man I could find who was willing to leave Bali was a cross-eyed youth of perhaps twenty. He came aboard and we prepared to sail. Many a cross-eyed man have I seen — but never one like this. One pupil stared east while the other gazed to the setting sun. When he looked at me suddenly with one eye, the other was apt to slide out of sight entirely. I became so dizzy and unnerved from looking at him that at the last moment I put him ashore and sailed alone.

Three weeks later, having been overhauled and painted, Svaap was ready to sail for Batavia. I had a new crew—a husky youth from the island of Madura whose people are fine sailors but a bit quick with the knife. At almost the last minute I was called to the telephone in the shipyard. It was

the superintendent of police.

'I have good news,' he said, 'I have your crew here in jail for you. We will send him aboard just before you leave. You can't leave this Tahitian in Java for we have enough troubles of our own.'

It seems that Etera had taken to the mountains in Bali when he had heard of my return. At length he had been starved out and was found by the police who had kept him in custody there. When a ship left for Java they forwarded him along to me. And so Svaap left Sourabaya with her old

complement - Etera somewhat bedraggled and crestfallen, and myself a bit dubious as to whether to be pleased or otherwise'

Everyone that I met in Sourabaya excepting the American vice-consul was helpful and friendly. The latter, deciding that my several months' collection of mail was in his way, had returned important portions of it to the senders in spite of instructions to hold it for my arrival. With new equipment for Svaap representing a considerable amount of money already in his keeping (surely a sufficient guarantee!) he had refused to pay a charge of a few cents which the authorities required to enter a shipment of special photographic supplies from New York. Instead, he instructed them to return it to New York with the result that I never received the things until a half year later in Port Said. Upon arrival at the consulate I was brusquely requested to remove my things at once as they were in the way.

Once again - in Messina, Italy - we had unpleasant contact with the local consulate. In order to grant us the usual privilege of buying fuel in transit, that is without payment of import duty which in this case doubled the cost of petrol, the customs authorities required an affirmation by the consul that Svaap was an American vessel. This the consul refused to give in spite of our registration from the Department of Commerce, on the grounds that Svaap was not listed in Lloyds.

'For all I know,' he said, 'it might be a Chinese junk.' Probably he was legally quite right in taking this stand, but one would think a certain amount of judgment permissible in such a case.

In order that I shall not be accused of critizing an already much maligned service it is only fair to say here that these experiences are the exception and not the rule. We have continually depended upon consulates to take care of our mail, and often packages, until our arrival. I have

gone to them for all kinds of advice and information. In the majority of cases they have been extremely helpful and have gone out of their way to offer hospitality, to open the doors of clubs, and to make my stay pleasant. Not a few have survived that final test of true hospitality in the tropics: the offering of a fresh water bath and even the freedom of their homes. This better majority in a service that is constantly improving will not resent criticism of less diplomatic colleagues where it is due, for only thus can the group as a whole be brought to a higher plane.

The Java Sea is a pleasant place during the fine season. Light breezes waft you along slowly and you are in the company of almost countless strange craft. The whole western end of the sea is shallow and very uniform in depth—ranging from twenty to thirty fathoms. As a result you are constantly passing Malay fishing praus, venture-some craft, anchored far out of sight of land and to all appearances in the middle of the ocean. They put down fish traps, sometimes miles apart, fifty miles offshore—and then go off and leave them. How they ever find them again I don't know, for they have no scientific navigation. It must be an inborn sense of position.

One night at sea I was startled nearly out of my senses by a huge ghostlike white flapping form which bore down upon me from the air as I dozed at the wheel. It brushed against me before I could even jump, and then as it hit the rigging I saw that it was a fisherman's mark — a long leaning moored bamboo with a big white flag thereon. Another night there appeared ahead a long procession of lights like a floating Coney Island. They rushed past, only a quarter of a mile off, a magnificent sight. We learned later that it was part of the American Pacific fleet on its annual cruise.

Approaching Tanjung Priok, port of Batavia, ten steamers

converged upon us and passed between 2 a.m. and dawn. That morning sixteen ships entered port — quite a usual thing according to the captain of the port. The amount of shipping that goes on in Java is almost unbelievable. In fact the whole of Java, with its great modern cities, roads, and industry, is rather amazing to one who has not been there before. If only the Dutch colonials would not fill their overfurnished homes with so many mammoth floor lamps that to go from the drawing-room to dinner is a feat comparable to crossing the Black Forest, one could be quite at home.

There are other eccentricities, such as the 'Dutch Wife', - that curious firm cylindrical pillow which you invariably find in the middle of your bed and with which you are supposed to sleep to keep cool. As a matter of fact, sleeping on your side with one leg and one arm propped up on this strange bedfellow, you actually do sleep cooler, for it allows ventilation between the limbs.

Then there is the Dutch bath, a solid-looking tub filled with water, which you will meet in the bathroom. You will find it somewhat awkward to get into the first time, for it is rather high and short and the surface is apt to be a bit rough. However, as you will not be getting into it a second time, it does not matter very much. The fact is, as you will discover very shortly to your horror, that you have spoiled the week's water supply by bathing in it. You must bathe by dipping out small quantities of water in what appears to be a child's beach-pail, and pouring it carefully over yourself while standing a safe distance from the tub.

To the dinner hour, which is somewhere in the vicinity of eleven o'clock, you do eventually become accustomed. All of the strange ways, even to doffing your hat to the men, become natural after a while.

The Sailing Directions warn one that with the coming of November bad weather can be expected in the western end

of the Java Sea. On the first of the month we were driving hard through Banka Strait bound for Singapore. The flat monotonous jungles of Sumatra stretched away into infinity on our left and sent out heavy mysterious perfumes on the hot south-west wind. Besides its perfumes Sumatra sent out to us hordes of microscopic flies that ran like lightning on deck and bit quite ferociously. Banka, on our right, was also flat jungle, but relieved with a few little hills. This was the big Dutch tin-producing island. The waters of the strait were yellowish and very well buoyed. Next day we were again in open water — making for Berhala Strait.

We were getting very close to Singapore and hoped to get there with the good weather. We were one day too late. Great wicked-looking squalls had been making up over Sumatra, and instead of going off each about its own business they clubbed together and hung fire for a grand burst, which hit us at 3 a.m. on the third. It blew with gale force until noon and drove such quantities of rain before it that vision was impossible. This was a 'Sumatra', as those terrific squalls are called locally, and they deserve great respect. They could easily dismast an unwary vessel.

At 5 p.m. the same day we again crossed the Equator, northbound this time. That night I did not turn in at all, for we were threading our way by lights and moonlight along the devious approach to Singapore, through the labyrinth of isles that hides the real harbour. From the entering light at Banka Strait this well-marked watery highway finds its way about three hundred and sixty-five miles to Singapore.

As usual when things have gone too smoothly, we paid the price in a duplication of the previous day's dawn-squall. But this time we were not caught unawares, and as I was confident of course and current for the next and last light, we drove on blindly. In the height of one of these 'Sumatras' one cannot see ten feet. They are like a West

Indian arched squall magnified considerably and lasting much longer.

We rounded the wreck off Berhante Light, and we were at last in Singapore Strait — in China waters! Before us, its stupendous shipping making the great harbour a forest of masts, lay Singapore, crossroads of the world. We risked our lives in the jumble of lighters, praus, scows, junks, launches and so on, to search for an anchorage. We were as far East as we would get now, in spite of having always sailed west. From here on we would really be on our return to Western Civilization once more.

CHAPTER XXI

SINGAPORE boasts several bars that serve some of the best drinks in the East — and the East is noted for its drinks. You must learn to refuse diplomatically at times, as it is impossible for the guest to drink with all who invite him. If you have a hard drinker in your family and wish to cure him or kill him, send him (with appropriate introductions so that he gets into the proper set) to Singapore. Let him remain there on a prolonged visit, entering joyfully into the social life, accepting all invitations to club, hotel, and home. If at the end of three months he survives, and can still look another drink in the eye, you may give him up as lost for ever.

The inhabitants of Singapore are apt to tell you what a deleterious climate theirs is. It is customary to go home to England every couple of years to recuperate, for otherwise they could not stand it. Although the English colonist, wherever he is, is apt to make himself appear a bit of a martyr this tendency is especially noticeable in Singapore, and in the East generally.

Curiously enough, I know several old residents in the vicinity of ninety years of age who have never been away from Singapore but who enjoy the most hearty good health. They happen to be people not particularly addicted to the hectic social life that prevails. For instance there is 'Dad' Stevens, who is very nearly this age but who still conducts daily the business of the Singapore Ship Chandlery Company. Dad is chiefly famous to-day because every evening as the sun is setting he can be seen skimming over the surface of Singapore Harbour in a single-seated racing shell, handling his oars like a college oarsman. The shell is painted

red and Dad is attired in a bright red fireman's helmet. Several times the swooping seaplanes of the Singapore Flying Club have narrowly missed him, and Dad wants to be as conspicuous as possible for he rather likes this life.

But to return from this digression — which was merely to suggest that perhaps it is not entirely the climate which has ruined so many constitutions in the East — I must admit that I have nowhere found more friends than here, and in Penang, and Malaya in general.

I received steady discouragement while in Singapore regarding the continuance of the voyage. The Commodore of the R.S.Y.C. in particular became exceedingly exercised at my determination to go home through the Red Sea and Suez. He was convinced that if the Arabs didn't get us, which they probably would, we would never make Suez against the heavy head winds and short steep sea. As a matter of fact the Arabs did get us — not only once but three times. Once we got away by bribery, once through blind luck, and once by taking a very long chance. And it was two months before we made the thousand miles to Suez after we lost the north-east monsoon at the lower end of the Red Sea.

When we were ready to sail from Singapore a bulky package came aboard with the Commodore's card. He thought that in spite of our .30/30 Winchester rifle, our shotgun, and our .38 S & W revolver, we were insufficiently armed to tackle the Arabs. The bundle contained a gift of a .305 repeating rifle, a double barrelled 12 gauge shotgun, and another revolver! I had mental visions of Svaap bravely holding off thousands of Arab pirates, with guns bristling from each porthole and Etera and I dashing madly up and down the line firing one after the other as in the siege of the French fort in Beau Geste.

Having survived the festivities of Christmas, 1930, in Singapore, and not daring to face those of New Year, and having bailed Etera out of gaol several times (it was getting to be a regular custom by now) I collected my thoughts and set sail on Sunday, December 28th.

For the next three weeks we cruised along through the Strait of Malacca, stopping at several of the interesting little towns on the Malay coast. I rather fell in love with Malaya and would like to go back there some day to see it more leisurely.

Malacca itself, where we spent three days, has of course the most interesting history of any port in this part of the world, nor has it lost its charm even though it long ago relinquished its crown of importance to Singapore. Malacca has always been a religious and political pawn. Buddhist at first, a prosperous Hindu kingdom, it was converted to Islam in 1414. Later Christianity slipped its foot in. It has cannoned from one ruler to another so many times that one loses track. It has been a tributary to Siam, and has recognized the authority of Chinese emperors. In later years it has been mauled about, struggled over, captured and recaptured by the various East India Companies, by the Portuguese, the Dutch, and the British. It abounds with famous names: D'Albuquerque, De Sequeira, St. Francis Xavier, and so on. Malacca was where this famous saint worked his miracles and where he was buried. In the hands of the Portuguese, who had a vast empire in the East, Malacca was the centre of all trade in the Malay Archipelago. In fact Barbosa wrote: 'This city of Malacca is the richest seaport with the greatest number of wholesale merchants and abundance of shipping and trade that can be found in the whole world.'

But enough of history. If you are within a thousand miles go and visit Malacca of to-day. You will find it has character, and you will see many curious things. You may even see, as I did, the narrow river entrance being made deeper by human dredges. That was my introduction to Malacca.

-01

We cautiously entered between the stone jetties that markthe river mouth. A small flat scow was moored in midstream where it was about six or eight feet deep. A coolie
clung to its side in the water. He held a bucket in his
right hand and suddenly took a deep breath and disappeared under water. There ensued a short period, during
which bubbles rose to the surface. Then he reappeared,
gasping. He reached up and emptied into the scow the
bucket of mud he had scooped from the bottom, a considerable quantity of it running down his arms and slopping
into his face in the effort. He would rest a minute and
repeat. This is quite illustrative of the modernity of the
charming place.

Then there is the reservoir. It seems that it sprung a rather bad leak and something had to be done. The local engineer, somewhat of a genius — for it was he who designed and built at a rather staggering cost the steam dredge which was later abandoned when it was found that the coolie already mentioned was more efficient — sprang to the rescue of the town's water supply. It was decided that to repair the crack would be too difficult, whereupon they built a tank below, to catch the escaping water which was then pumped back into the reservoir. Sleeply, old-fashioned, interesting Malacca!

We left Malacca late on the last day of the year and were under sail when the New Year dawned, heading for Klang Strait, an offshoot of Malacca Strait. The coast of Negri Sembilan was low jungle, backed by a blanket of white mist with a few miles showing above some distance from the sea. The waters of the strait were an angry green, restless and disturbed from the surrounding squalls, and a tiny fishing boat kicked about in the chop near by, showing a red lateen sail. We did not get the monsoon until leaving Penang, for it does not reach the Straits where light variable weather and squalls hold sway. So always between Singapore

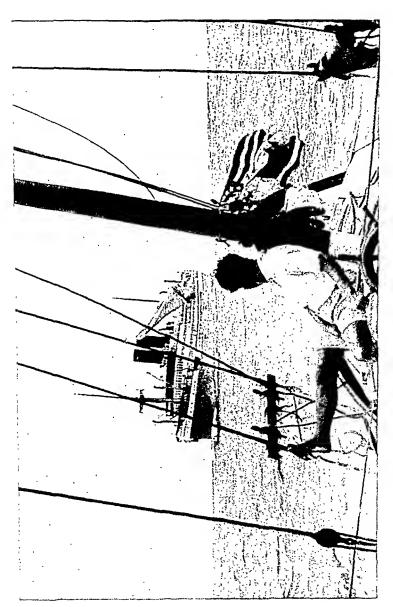
and Penang we were working light winds, mostly ahead. Our progress was by six hour laps, a fast one with the north going tide and a very slow one with the reverse. We reached Penang eventually, after various adventures in places along the way and unforgettable days of sailing in company with scores of the most picturesque craft in the world.

I must say a word for the junks. First of all, whoever named these remarkable Chinese craft junks was crazy. Disreputable they may be, barge-like even, with masts like Harry Lauder's stick grown to the thickness and length of a telegraph pole, and sails consisting of various pieces of vegetable matter, old clothing, canvas, or what you will. But give them a little breeze and they sail like witches. One day we were passed by one, as we ploughed at top speed, power and sail, trying to make the last mile or so to a port before dark. She lumbered by awkwardly, to all appearances standing still but actually doing about eight knots. She was rolling serenely at anchor when we got in. I laugh now when I remember how I tried to catch up to one for a picture in Singapore Roads. That was before I knew them. With their much-battened sails, somewhat bird's-wing in shape, and multiple sheet that allows them to control each section of the sail, they have developed the most powerful driving force per unit-area that I have seen.

The crews of these junks are marvellous. When a crisis occurs, such as the night one ran into us in Penang Harbour, they stage a veritable babel of confused shouting and running about, with no one actually doing much good. I suppose that the only reason they get along, and out of tight scrapes, is due to the partial truth of the old adage that things will right themselves if left alone. Or else the

other fellow will right them for them.

Penang is a remarkable town upon a beautiful island a mile from the Malay coast. With its curving shores of little



'By appointment'

beaches and rocky headlands, its palm groves, its wealthy Northam Road where all the valuable shore property is owned by Chinese who have built imposing mansions there, and its mountain — Penang Hill it is called — it is almost as lovely a spot as can be found.

There is a very colourful Chinese quarter, which being smaller and more condensed than that of Singapore, is perhaps even more interesting to the stranger who has not lost his desire to poke about in the hiving centres of Oriental life, where teeming thousands live, work, eat and sleep, and die in colourful, gay-painted, but almost inconceivably confined quarters. You may go and eat at Loke Thye Kee's of such choice dishes as sliced chicken soup, scrambled bowels, and many another intriguing dish, and you may have five or six courses for the sum of one Mexican dollar which is (or was then) 56 cents in the U.S.A. currency. For two cents you can ride all the way from the water-front to this Chinese Ritz, a distance of about three miles, in a rather amazing little trackless trolley. If you are a spendthrift you may take a rickshaw for ten cents.

You sit on the balcony at a small table and a confused babel comes up from the street: shouting rickshaw boys, bicycle bells, tin motor horns which are the delight of the Oriental, hawkers shouting or beating a tattoo on their little pieces of wood, wooden drums, and the clack of wooden shoes. The leather drum in the temple around the corner is beaten furiously and Islam assembles. A whole Chinese family occupies the table next to you, the man in semi-European dress, the women and children in flowered silk trousers and jackets. Your eyes return like iron filings to a magnet, to the tiny bound feet of the mother, encased in dainty doll's slippers that look like Cossack boots in miniature. If the proprietor adds up 60 and 20 and 25 to equal 1.39 put it down to the Chinese calculating machine with its little balls on wires. It is part of the game to get

out paper and pencil and draw pictures till you convince him of his error — he will respect you the more.

Walking in the bazaars later, you approach a beautifully-built bronze-coloured girl in silk sarong and shawl, with glossy black hair to her hips. She turns and you recoil from a bare hairy chest and voluptuous male mouth distended around a huge cigar. An Arab in a red fez squats on his hams on the kerb, manufacturing tiny cigarettes from red tobacco and paper like corn-husks. You wonder if the Shriners would be so keen on their red fez if they could see the people to whom the fez belongs, and smell them. One man is selling leaves. The food of all nations is being cooked in a hundred ways about you. You are in a maze of smells, a jumble of costumes. There is the never-ending ding-dong of wooden slippers on the pavement. There is a fat shaven-headed Chinaman with a tiny comical skull-cap. Then there comes a dude in a wing collar, aping the white man's dinner dress. Two beautiful aloof Chinese ladies, all in black satin, pass in a rickshaw. Then comes a Malay riding a bicycle boasting so many extra appurtenances that it looks like a steam organ.

Wealthy Chinese roll by in magnificent cars, and if you think a rich European can put on side you should see a similar Chinese family putting on dog. You are reminded of the fact that automobiles in this country are restricted as to the number of lights permissible, for given a free rein the native will cover his car with innumerable coloured lights so that as it comes down the street it resembles an overdecorated Christmas tree on wheels, like some I saw in Java. An insinuating man approaches you cringingly every few minutes with some proposition and between times he goes off and argues vociferously with a man in a fez and a Kaiser Wilhelm moustache. The prettiest of all is the rare Javanese girl in typical Java sarong, bright scarf over her head, and heavy gold bracelets and anklets. She hides

behind her veil from your glance and then you notice that she is smoking. It somehow seems incongruous.

You enter the market. It is late and many of the vendors are asleep on the floor. American newspapers are serving their ultimate destiny, being made into thousands of paper bags for the morrow's sales, or being wrapped around a sarong length of Java batik made in Germany. All through the Pacific, the East Indies, and the far East, one gets one's marketing wrapped in old San Francisco Examiners, Boston Americans, and so on. In fact I received most of my news of cufrent events (perhaps a year old) in this manner for two years.

By now you have learned the game of bartering in the bazaars. You know, if you have been long enough in the East, that the \$2 slippers can ultimately be bought for 25 cents, and that the sarong which cost the vendor \$9.50 will be sold to you after a half-hour's debate for \$1.75. Your coin is bounced on the stone floor to see if it is genuine, for there is much false money in circulation.

You will have seen by now that I am somewhat fond of Malaya. I was even going to tell about the sorcerer and his pupil, the pupil that was being made invulnerable and who died when the sorcerer speared him to show him how invulnerable he was — but there is no time.

Mr. Parry, Chief of the Harbour Board, offered the use of the oldest dry dock in the East and all service and work in overhauling Svaap without cost. All that was necessary, he said, was to indicate to the superintendent what was desired, and it would be done. This is the spirit that one meets with constantly in the East. The day after Svaap came out of dry dock we left.

We had a glorious sail from Penang to Sabang, the little island off the north end of Sumatra, one of the best runs of all. The monsoon blew fresh abaft the beam and we did the 325 miles in just 48 hours, and a quarter of this time

we were under jib alone. As a matter of fact this was the one time my dead reckoning was out — way out too — and was a warning that it is never safe to relax a minute from careful navigation. At 7 a.m. on the second morning I estimated that we had 65 miles to go to Sabang, and turned in for a nap. I awoke an hour later to find land dimly visible through the mist on our port beam. A hunch, and the general contour of the thing made me suspect it to be Sabang — with us heading in the general direction of Ceylon, a thousand miles away, with almost no supplies aboard. So we quickly headed in, and saw that it really was Sabang. If we had run another half hour we could never have made it against the sea that was running, and Ceylon would have been the only alternative.

CHAPTER XXII

We stayed in Sabang only long enough to lay in a stock of supplies for the thousand-mile run to Colombo, and on the 18th of January, 1931 we sailed out into the open sea before a heavy driving rain squall. The monsoon was blowing strong once the land was left behind, and we tore along steadily at six and seven knots. There was quite a boisterous sea but it was with us so that it threw us along on our course.

There followed days of supreme sailing. The seas piled up on our quarter and we slithered from one white-topped sapphire ridge to the next, driving her to the limit under mainsail and a small spinnaker. I would turn in at seven o'clock in the evening for my six hours off, and from my berth I could see Etera at the wheel—a black shadow leaning against the mast, singing Tahitian songs timed to the roll of the boat. Absorbed in trying to identify the various creakings and galley noises that blended with the rushing sound of the sea on the other side of the 1½ inch planking next to my ear, I would fall asleep.

At I a.m. I would take the wheel, turn out the compass light, and steer by Orion. This constellation had long been our guiding beacon at night, as we followed it westward around the globe. We had by now become so familiar with the bearings of various stars that we could steer as accurately by them as with the compass, and of course it was much easier on the eyes.

The northern part of the Indian Ocean — between Sumatra and the Gulf of Aden — is in the region of the northeast and the south-west monsoon. I had planned things out

to be crossing at the most favourable time, which is between December and March. This is during the north-east monsoon, which is a magnificent wind for a sailing vessel. The season of the south-west monsoon should be avoided because of prevailing heavy weather, and a passage in the period between monsoons would be very trying and uncertain, due to calms and squalls. Even during our crossing we had some very bad squalls—usually just at midnight. There was always ample warning in the great black cloud masses of the disturbance, and we could drop all sail just at the last moment, getting it up again gradually as soon as the first intensity of the wind was over.

One hundred and fifty miles a day and more we made—never less—and that is good going for a small craft. We have never equalled our first long Pacific jaunt, however, when before the full power of the south-east trades we consistently made runs of a hundred and seventy-five miles a day, and a maximum of a hundred and ninety. That, I think, will have to stand as the record for all time for Svaap, although I have always had an ambition to break two hundred.

We had quite an exciting time one day — a rendezvous at sea. Friends of mine were sailing from Singapore on the Dutch mail steamer, *Slamat*. I had plotted her course and estimated that on a certain day she would be in a certain position in the Indian Ocean, and that if everything went well we also would be in that approximate position.

I told my friends to be on the look out on that day, but although we navigated very accurately and kept to the estimated schedule, I never believed we should see the ship. The day came, and at noon we saw a plume of smoke astern. We were doomed to disappointment, for it was the City of Corinth, a cargo boat which slowed up and gave us flag signals as she passed. But no sooner had she tooted farewell than we turned to see a big grey steamer bearing

down upon us. It was the Slamat. The almost impossible had happened.

She slid up alongside with engines stopped. My friends were on the bridge with the captain — and for fifteen minutes we swapped yarns there in the middle of the ocean. Both sides took pictures, and then the great propellers started churning and we were once more alone at sea.

This may be a most remarkable example of the accurate navigation possible with practice on a very small craft. Or it may have been a most astonishing bit of luck. In any case it was unique as the first time in the *entire* voyage that we had spoken a ship at sea, and not only one, but two within a half-hour of each other.

We picked up the Little Basses lighthouse just after nightfall on the 23rd. It was very cold and clear, like an autumn night at home. The stars were like small suns. Later a welcome breath of perfume came off the land, and we began to feel once more the excitement of landfall which never fails to thrill.

Dawn found us among countless outrigger craft with brown and red sails, all bound for the fishing banks. We coasted along yellow beaches backed by a solid line of coco-nut palms, with low hills beyond, and commenced our beat up the western coast of Ceylon. Toward night the picturesque fishing craft steered shoreward again but we kept on.

We had made a splendid run — nearly a thousand miles in six days and I was beginning to wonder what price we should pay. I am not superstitious, but I have found that almost every exceptionally fine record we make is balanced up by a spell of contrary weather or some other undesirable event. It is the old story — the fiddler must be paid. In this case we got off easy, but had the shock of our lives.

It was in the middle of the night. We were close in, abeam Barberyn Light, when we heard a peculiar noise and

discovered an enormous waterspout towering over our very heads. We dived for halyards and dropped all sail, while the flashing light of Barberyn glared through the great funnel and added a supernatural effect to its already phosphorescent luminosity. It was a veritable pillar of fire. It broke just as it was about to suck us into its gorge. The anti-climax was a terrific cloudburst, as if someone had opened the floodgates of a heavenly Niagara. This is the only time that I have seen a spout at night.

We entered Colombo next morning and stayed a week. All in all I did not like what I saw of Ceylon. The man who wrote of it: 'Where every prospect pleases and only man is vile' came near the truth. It is a beautiful country, and its history and legends are enchanting. But to me—coming from worlds where begging is unknown—it was a disappointment to find its people nothing but a race of beggars whose persistency is so appalling that it ruins your visit. Had I gone there first—before knowing the South Seas—perhaps it would have been different.

Svaap had been a most amazingly comfortable little ship. Many small boat voyages seem to consist largely of idiscomforts, accidents, and privations. I must confess that with two or three exceptions I have always been able to go below out of the worst weather to a welcome dry cabin. And that is one major explanation of the serenity and success of the entire voyage.

The wettest exception to this happy condition was other run from Ceylon to India. Down out of the Bay of Bengtal the north-east monsoon swooped upon us, funnelling between Ceylon and the land mass of Southern India. Full upon our beam it came, driving a high sea before it. Under reduced canvas we carried on, staggering nearly to our beam ends with each sea. Cape Comorin, the southernmost tip of the Indian peninsula, tempted us on, proffering shelter.

This whole Malabar Coast, as the west side of the peninsula of Southern India is called, is subject to a very heavy surf even during the north-east monsoon which makes it a lee shore. Most of the anchorages are merely open roadsteads, so caution is necessary. We found that we could progress along the coast quite successfully, by working the land and sea breezes. During the south-west monsoon, however, this coast is practically closed to navigation.

I should advise any yacht in this vicinity in the right season to spend quite a bit of time on the Malabar Coast. It is beautiful, backed by the impressive range of mountains, the Ghauts. The peninsula is aptly called the Garden of India and consists of several independent states under native rulers. All the towns along the Malabar Coast for a distance of two or three hundred miles are connected by a vast backwater system of canals and lagoons. I should think that one of the most interesting of all trips in India would be to do this inland waterway in a small boat of some sort, perhaps with an outboard motor. It is a pulsing artery of a most intensely interesting section of India, ruled by Maharajahs, abounding in magnificent old palaces, temples, walled cities, ancient Indian art and culture of all sorts.

I had planned to go on to Bombay, but the season was getting too far advanced and it was imperative that we get across to Arabia and well into the Red Sea before the northeast monsoon died. So after several weeks on this coast we put into Mangalore where there is a harbour controlled by a six-foot bar offshore, to get supplies for the fifteen-hundred-mile voyage across, and information regarding Arabian pirates.

The latter question was troubling me considerably. I wanted to see something of the Arabian coast, and if possible, Sokotra — an island east of the Gulf of Aden. All sources and information agreed that it would be folly to

£⁴, 29

go near Sokotra. Its inhabitants have earned a widespread reputation for piracy. Just how true it is I don't know. Six months before, I would have taken a chance and gone there, but now, with so much of the voyage successfully completed, I found myself becoming more and more cautious. I could not afford to take chances now that I was getting so close to my goal. So I definitely cut out Sokotra.

Regarding the Arabian east coast, the opinions differed, although the majority thought that it would be safe between Aden and Makalla, or even to Merbat. Northward of Merbat, they said, would be unsafe for a small craft. Almost anyone would be apt to turn pirate in that vicinity if oppor-

tunity offered, it was believed.

We left Mangalore on the 20th of February, 1931, with a very poor stock of supplies, and water which we had chlorinated because of its doubtfulness. I used too much of the chemical, and we had to drink what tasted like a dilute solution of Zonite.

Again we pointed our bow to the west, with 1500 miles of open ocean ahead to Makalla. I had been optimistic about this run, prophesying one hundred and fifty miles daily. I forgot that we were not a steamer. Perhaps I was a little excused because of our previous experience with the monsoon, when we had kept to this daily schedule as regularly as clockwork.

Now, however, the monsoon seemed to have deserted us. I think we were a little too far north to get its full force, and it was getting toward the end of the season. In any case we made very poor daily runs, of only seventy or eighty miles, and I soon realized that we would be running short of food. Perhaps we might even be forced to put in to Sokotra for supplies in spite of the pirates.

At the end of the week we got going a little better, but on the tenth day we had done only a thousand miles. I had expected to make Makalla in this time, so we went on a reduction diet. for the rest of the voyage.* Our daily ration was cut to six very small potatoes, half a tin of sardines, half a tin of soup, and a tin of evaporated milk. Oh, yes, and one onion. I have never been without the latter, and believe that it had a great deal to do with our health. On this diet we were not hungry. The semi-fast was very stimulating and I cannot remember a time when my mind was so active. I schemed and planned and studied for more than fifteen hours a day and felt in perfect health. I had perfected the ability to keep the boat on the course and work with papers or books at the same time. The weather was perfect for this sort of thing, although not for good runs.

We passed a ship one day and I was tempted to hail them for supplies. But I was determined to finish the voyage without any assistance, so we merely waved a greeting to them and sailed on.

The sun was terrific those days. Our rigging was bleached white and the deck paint cracked and peeled. The very life was scorched out of the sails. Light variable breezes and calms had taken the place of the good north-east monsoon. We did have something to be thankful for though, for down to the south of us, below the Equator, the hurricane season was raging. Ahead of us lay the Gulf of Aden, with nine per cent of gales, so perhaps we should have been more appreciative of our Indian Ocean weather. It is not human nature, however, to be content with what one has, and we yearned for strong winds.

We had a tank of petrol sufficient for about a hundred and seventy-five miles. This I saved to the very end. When Makalla was about this distance away and we had just one

* This may seem like poor management. It was, but it could not be helped. I left Ceylon with exactly twenty dollars and could get no more funds until reaching Aden where I expected a cheque. I saw India, and bought supplies for the voyage across the Indian Ocean all on ten dollars. The other ten I saved for Arabia.

tin of soup and four potatoes left, I started the engine and ran her full speed until we sighted Arabia. It seemed strange to have something to look at again as a change from the omnipresent sea. The coast stretched away before us, red, barren, with here and there a village and its big white mosque. Behind towered sun-scorched hills full of hostile Bedouins. To the north lay the Persian Gulf. Three hundred miles to the south was Aden and the Red Sea.

Night came. We reached a promontory behind which lay Makalla, the only town of importance on this section of coast. It was the capital of the Sultan of Makalla, the potentate of this region and the islands of Sokotra. Never will I forget the scene of golden beauty as the moon, rising behind ancient Arab forts on the point, threw their jagged outline into grotesque profile. And then the light crept on to the town behind the point and illuminated a mass of tall white buildings that clung piled in disorder at the foot of an abrupt cliff. It looked like an American city of skyscrapers, not a forgotten little Arabian town. Tiny white forts perched ridiculously along the top of the cliff, cast in sharp profile against the purple sky by the glow of the moon.

We had completed the crossing of the Indian Ocean. The voyage of Svaap, and this earthly cruise of its author, nearly came to its determination also, there in white Makalla, not from any danger of sea or nature, but at the hands of man.

CHAPTER XXIII

It was late at night. On shore drums beat, voices cried out in peculiar song, torches threw a red glare upon strange buildings. Svaap, tired from sixteen days at sea, lazily turned her bow toward the sultry night breeze, and slept. But I, feeling adventure in the air, went ashore in the canoe. I little dreamed what awaited. Later I learned that it was the climax of the Id al Fitr, the festival of the breaking of the Ramadhan, the Mohammedan month of fasting. From the desert had come throngs of Bedouins who were now within the city walls. All the men of Makalla were abroad, collected in the square. A state of religious fanaticism prevailed, but I knew nothing of all this.

There are no Europeans in Makalla. Only upon rare occasions have they been there. Into this Moslem stronghold I stepped, unknowing. The streets were deserted. I moved toward the noise of the celebration. The moon cast weird shadows in the narrow dusty road and many goats and chickens fled at my passage.

Then I came upon the square, out of a narrow dark alley. All around the edges glowing braziers threw off a red glare and filled the air with acrid smoke which mingled with the odour of a thousand sweating humans. About them squatted little groups of fierce-visaged, dark-skinned Arabs, drinking out of miniature cups. The mob itself had formed a ring within which some performance was going on.

I was very tan, and passed unnoticed. I wormed my way to the inner row where I saw a huge, long-haired, bearded Bedouin whirling in seemingly cumbersome but lightning-like evolutions in a sword dance. His long silver blade

caught bolts of red light from the flaring torches and lamps that threw a fitful light upon the scene, and cast them here and there like lightning from the hand of Zeus. His shining black hair, that would have reached to his waist, whirled in black clouds about him, as did his flowing belted gown. Faster and faster he danced until his sword became but a streak of light, flashing high and low.

Then it seemed as if he were dancing to me. His dilated eyes were fixed upon mine. I could hear his breath. Beneath his heavy black beard his mouth was slightly parted. He was circling around me, and I also slowly turned, for I could

not tear my eyes from his. I was as one hypnotized.

Without warning, the throb of the drums ceased. The bearded Bedouin sank back upon his sword, facing me. I felt as if I were returning to consciousness from an anaesthetic. I remembered where I was and looked about.

No longer was I in the midst of the crowd, watching a weird performance. The mob had formed a new circle, without my noticing, to include both the dancer and myself. A shiver ran through me as I felt a sudden terrible menace. The huge dancer was moving again. He was coming toward me. Once more his sword took life. But this time there was murder in his eyes.

The Arab, I knew, admires courage. With a terrific effort I wrenched my eyes from the man's hypnotic face and turned my back upon him, wondering when I should feel cold steel between the shoulders. I was imprisoned with the dancer by a glittering wall of steel; long graceful swords, silver curving scimitars, short crescent-shaped blades with jewel-set handles. I looked about for an opening. There was none.

I moved toward that barrier, hoping that perhaps it was only a part of the dance, after all. The swords only became more menacing, and a muttering which had commenced to run through the mob rose to a higher pitch. 'This,' I

thought, 'is the end.' I wondered what would become of Svaap, lying out there with poor Etera aboard.

In all that crowd, one figure caught my eye; a tall, powerful man who stood out as a prince among peasants. He was garbed in white silk robes, with a heavy black cord at the waist. His handsome face with square black beard was set in a white turban with a mantle which fell to his shoulders. I realized that his eyes were trying to say something to me. I caught a slight lifting of the eyebrows and a motion of the head. Then I understood.

I had slipped a revolver in my pocket when I left the boat, little thinking it would be useful. Now I had it out, and in a second was at the side of the white-gowned Arab. He swung his sword in a circle, brushing away those nearest us and making a breach in the human trap. I advanced, and those in front of the gun recoiled in hesitation. The pressure would close the path in a moment, but before this could happen we stepped into it and fought through the surging mob, protected in front by the gun and behind by the long, slashing sword. A sword thrust from one side ripped open my sleeve.

My friend uttered a sharp cry — three or four more conspicuous figures joined us, and from somewhere appeared several armed men who seemed to be soldiers. Again I was in a circle of steel, smaller, but protective this time. We hastened through the narrow streets followed by an awful din as the Moslem throng rushed after us. But my

circle of steel held.

The canoe was still where I had left it. My friends kept off the fanatics while it was launched. I turned to thank my saviour, the regal-looking white gowned giant, but he was gone. Who was he? I am afraid I shall never know. I never saw him again.

Part of my guard stayed aboard for the night. The next day dawned without further excitement. A delegation, one

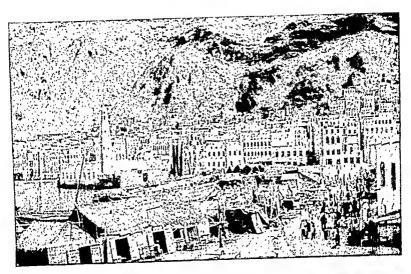
of whom spoke English slightly, called upon Svaap. They came from the Sultan. I was presented with his profound apologies for having been very nearly made an unwilling Christian martyr and was asked to an audience.

By day Makalla took on an even more theatrical appearance. In a setting of little forts perched on all the surrounding cliffs, and a crescent-shaped sapphire bay, stands the little walled city with its turreted castles, mosques, and ruins. The buildings are astonishing. Arabia is the home of the skyscraper. Before America was born this vast desert-land boasted walled cities of skyscrapers — not like our Gotham structures, but still high enough to warrant the name. Structures of six and eight stories made of mud bricks and limestone are no mean accomplishment.

The Sultan had given me a permanent personal guard although it was promised that no more trouble would ensue. It was explained that the mob had been in an intoxicated, fanatical state, and suddenly seeing a strange apparition had thought that it was an evil spirit to be destroyed. The handful of educated men present had realized what was happening and had come to the rescue.

Accompanied by the emissaries I called upon the Sultan. We entered the palace and the servants conducted us through cool empty stone corridors into a big square room with coloured glass windows, walls of beautifully carved woods, and a high ceiling supported by ornately carved pillars. Fine softly woven and beautifully coloured rugs carpeted the stone floor.

We waited a moment, and then the Sultan entered, clad in a beautiful sarong, a semi-European pongee jacket, a splendid multi-hued turban, and leather sandals. He was a fine specimen of a fine race, middle aged, in his prime, big, handsome, with an Abraham Lincoln beard from ear to ear. As he spoke, welcoming me, his fingers moved in expressive gestures.





Top: Makalla Bottom: 'I found a blood-letter plying his trade'

Over our tea we discussed many things. He was intensely interested in the voyage of Svaap and asked countless questions. He seemed very curious about the different types of people we had seen, particularly those who eat human flesh. We talked of the conditions leading to America's great wealth which is marvelled at in the ends of the earth. Neither of us had heard of depression at that time. At length when it was time to go, the Sultan wrote a few lines on a piece of paper and gave it to his chief Emir. Then I was escorted home.

We stayed several days with bodyguard and guides at our disposal always. Everything possible was done for us. I was taken out through the city gates to the oasis among the hills. On the way we passed a constant stream of tribesmen and women, flowing in and out of the city with camel trains, or strings of little nightmare mules all covered with painted orange spots. Out there beyond the city walls lived the workers - Bedouins who had tried unsuccessfully to adopt a town life. Many were descended from slaves. They were the carriers of water, fuel, and feed. All the water for the city was brought in from the oasis on the backs of black-robed women, in grotesquely lifelike goat-skins, with legs sticking out stiff with the pressure of the water. It was not a very appetizing sight, but we had to get our water supply in this manner here and in other Arabian ports later on.

Even the people of the friendly tribes come into the city armed to the teeth with weird ancient muskets and big cartridge belts, curious little curved cutlasses and knives stuck into the front of their belts. They are handsome men, these tribesmen, with an erect, impenetrable air about them. They have a charming gesture, shaking your hand and then

kissing their own where it has touched yours.

In the city everyone also goes armed. Every now and then unfriendly tribes swoop down on the coast towns,

although they have left Makalla alone recently for it is too well fortified and guarded. Instead they come in to trade

peacefully.

Everywhere, as I went about the city with my bodyguard, large black eyes gazed from behind harem veils. Camels kneeled to be loaded, roaring savagely all the while. Shegoats flocked about, wearing ridiculous little cloth bags over their udders to guard the milk for their owners. Little girls flashed into doorways as I approached, garbed in the most colourful of costumes. Various craftsmen plied their trades, silversmiths, gunsmiths, weavers, skin sewers, food vendors. In one little shop I found a blood-letter plying his trade. A man came in, complaining of some ailment. The practitioner made several fine razor-cuts on his patient's back and placed a silver cup over the place. Then he put his lips to the thin spout which protruded from the cup, and formed a vacuum inside by sucking. The vacuum held the cup to the skin and drew the blood through the fine cuts. Three of these cups were placed on the man's back, and then a fourth on the back of his skull. I was absolutely amazed when I saw the quantity of blood that was poured from the four cups when they were removed. The patient sat calmly all the while, smoking a huge water pipe.

Evenings, when the ever-changing colours on the quiet bay were darkening, and the shadows lengthened, I sat in the market place with the principal merchants and discussed—through the medium of Mussulum Balala, the only interpreter—the topics of the day. The kindness shown by these people was amazing. They continually pressed me to let them be of assistance. I really believe that I could have had

anything I asked for there in Makalla.

The day came when we were sailing. In the morning a delegation from the Palace called, dressed in their best robes and finest jewelled swords. In their wake trotted a

small bright-eyed little fellow ceremoniously carrying a leather bag that jingled.

After the lengthy formal salutations were over, the note that the Sultan had written that day was produced by his special representative and the small boy brought forth the bag. From it came rupees, gold rupees; there seemed no end to them as the interpreter counted them out on the table. One hundred and fifty of them there were when at last they were all stacked in neat piles. Then the interpreter (who wanted to know if it was true that people with long beards could not enter America) made his little speech, translating from the Arabic note.

'Great is the pleasure,' he said, 'with which Syed Bubakr bin Hamid Almihdar begs permission to confer upon the very brave American who has sailed for the first time an American boat to Makalla, a farewell gift of one hundred and fifty rupees. It is his desire to cement the friendship between America and Arabia — two great nations who must also be good friends.'

It was a beautiful gesture, a lesson that could well be studied by other nations who think of anything but friendship among themselves.

It was time to leave. We made our thanks. Then we sailed away, but we have not forgotten the little white city of Makalla.

CHAPTER XXIV-

IT was in Aden that Etera discovered a stunt which provided me with much amusement in the future, and caused consternation in many ports. It all went back to his pearl diving days, and an inherent desire to seek the limelight. By pure chance he stumbled upon a means of creating a

greater furore than ever before.

He had been ashore appeasing his pagan gods. Late in the cooling afternoon, when the sun-scorched inhabitants of fiery Aden were strolling on the water-front, he performed for them in the canoe. His not too sure feet slipped. He fell into the water. Something in his befuddled brain harked back to his diving experience and instead of automatically swimming, he went down out of sight to the bottom - in quest of pearls no doubt. He can stay down almost indefinitely, and outdid himself this time. A crowd gathered. Boats were launched. Two or three men jumped into the water but could not find him. Police whistles blew and a riot impended.

Suddenly a black mop of hair and Etera's billiken face appeared, some distance from the original spot. He blinked his bleary eyes, looked about him in amazement at the excited crowd, blinked again happily, and went down like a turtle, just avoiding his rescuers. The third time, he came up at the quay alongside the canoe, which someone had rescued. Nonchalantly he rolled into it - and went paddling up the bay as if nothing had happened, not even giving the crowd a glance. They stood there with a defeated air - not understanding - utterly confounded. The rescuers dried themselves and swore a few good Moslem oaths. Etera had

learned a sure way of being the centre of attraction.

The weather that was to plague us for two months and raise doubts as to whether we would ever reach Suez, lay in wait the moment we left Aden. On March 28th, late at night, we tore through the Strait of Bab-El-Mandeb before a southerly gale and entered the Red Sea. The strait was only a mile wide between the Arabian coast and Perim Island. A bright moon in its first quarter threw the jagged mountains of the cape in black silhouette against the sky and cast their fantastic shadows across the angry waters.

The next day we sought shelter behind Jebel Zukur, an uninhabited barren island of black volcanic stone and sand. For two days we clung there with full scope of chain, while the gale swooped down upon us from the hills, whistling like a blizzard at home. Then without warning the wind whipped around to the north and nearly cast us upon those hungry rocks. With only inches to spare we clawed off and reached open water and safety.

I was confronted with two plans of action in tackling the Red Sea. I could stay in the centre, avoiding the dangers of reef and pirates, or else I could go 'reef crawling'. The first was safer, but less interesting. Also, I doubt whether we would ever have reached Suez against the fierce northerly winds and short steep seas that prevailed there in the centre. I chose to go 'reef crawling'.

Along the Arabian coast stretch a series of poorly charted coral reefs. For three or four hundred miles one can pick a devious way among them in protected but dangerous lagoons, seeking anchorage at night. The head-winds which funnel down the centre of the Red Sea lose their force here near shore and there are no heavy seas to contend with. We might even get land winds at times to help us along, and would see more of the Arabs and their country. Uncharted reefs presented a constant danger, but although my three years of familiarity with them had not bred contempt, I had the experience and knowledge of coral conditions that

gave me complete confidence. The only danger I feared on this inside route was that of scuttling.

So on we sailed, past Mocha famed for its coffee, and along the Yemen coast until we came to the island of Kamaran where we entered the reefs.

Captain Wickham, the administrator, gave me what local information he had of the coast, warning me especially to avoid the Loheiya region which lay a day's sail from Kamaran.

There, he said, we would surely have trouble with the Arabs. Beyond, he did not know.

The Pilot Book for this region is less than useless. Time and again it refers to 'A conspicuous bush' as a landmark by which to locate an island or a harbour. When it is necessary to use bushes as outstanding landmarks it speaks poorly for the landscape.

We progressed slowly for several days after leaving Kamaran, groping along through an annoying sand haze from the desert, unable to see reefs or little sandy islets until almost upon them. Nights we anchored in uncharted lagoons, or behind offshore reefs, avoiding the few settlements we saw because of the fearsome reputation of the inhabitants. The scorching arid breath of the desert alternated with the saturatingly humid sea wind. Both felt as if they came straight from the door of a blast furnace. Even at night the thermometer was 95 or more. Strangely enough, Etera, child of the tropics, felt it much worse than I did and was constantly complaining. It was a parched and sunburnt land of endless forlorn sand dunes.

Then one day the barometer tumbled, and from the south came a driving gale. In company with a large cumbersome Arab dhow we flew down the coast, seeking shelter. I planned to find a little anchorage called Khor Nohud on the chart. Just before we reached it the dhow turned in through a different break in the reef. Confident that they,

with local knowledge, had chosen the best shelter from the storm, I cautiously followed them in, to a snug little coralgirt basin.

An hour later we were prisoners, not of the swarthy Arabs that manned the dhow, but of the white-robed Emir of El Birk — the fantastic Bedouin village of conical brush huts and stone houses that hung beneath a few palms on the barren burnt hillside.

I had seen it coming, when a boatload of heavily armed men put out from shore, but we were trapped. Even had we had time to escape it was impossible, for the dhow had shifted to a position that blocked the narrow pass. Resistance was out of the question. It was a hundred to one.

They clambered aboard and indicated by signs that the Emir wished to see me. Taking some of the ship's papers along I went, not knowing whether I was attending a reception or my funeral. I never saw the papers again.

We climbed to the village, and through its disorderly alleys, to the Emir's fortified palace where we entered an embrasure in the wall. Across the courtyard we went, silently. It was filled with strange staring Bedouins. Then up a dark stair on to a walled terrace where the others left their sandals. We entered a small square room, with heavily barred windows, and benches covered with Persian rugs round all four sides. There was no other furniture except a bare table with two books and a silver-handled lash.

Facing us from a niche at the opposite side, sat the Emir — enormous in his voluminous robes. Surrounding him, all around the walls, sat twenty-four lesser chiefs in various picturesque garbs. I was presented and seated in a dripping silence. Two riflemen guarded each side of the door.

Through the useless interpreter who knew less than a dozen words of French, I essayed a speech full of blithe lies as to my pleasure at being there. After an extended exchange of compliments, I was given to understand that I

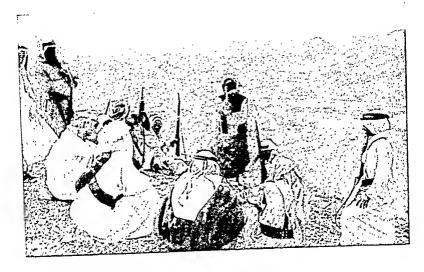
was being held for ransom. I wrote and signed a letter stating my situation and they sent it off somewhere by camel courier. I never did learn its destination.

If I am ever kidnapped again I hope I fall into equally hospitable hands. Complaining of the discomfort ashore I was finally allowed to live aboard Svaap under guard. When I sent word that our prolonged stay meant a food shortage, the Emir at once sent a whole flock of chickens aboard, and Svaap looked like a floating henhouse. I was a model prisoner, behaving as if I enjoyed it all in order to put them off their guard so that when the sentries found it tedious and confined aboard Svaap it was not too difficult to bribe them to watch us from the near-by dhow.

I was full of plans for escape but could no nothing with the dhow in her present position, blocking the only exit. We had two trumps which the Arabs had overlooked in not searching Svaap. In a locker under my berth lay several guns and plenty of ammunition. Hidden in the gloom beneath the bridge deck was a shapeless object covered with a tarpaulin: the unsuspected engine. Had they so much as dreamed we had power, things would have been different.

Our chance came with the termination of the southerly blow. The wind changed to north-west and necessitated shifting of anchors since there was not room enough for the boats to swing in the confined little basin. We helped the dhow move hers first, seeing to it that they were placed so as not to interfere with our preconceived plan. Then, ostensibly to keep Svaap from going on the rocks while moving her heavy anchor and chain, we placed a light hook on a manila line near the pass—just where it would be best for a quick exit. Dropping astern on this line we hove up on our heavy anchor until it swung clear of the water.

The Arabs on the dhow, not more than fifteen yards away, watched with interest the proceedings whereby two men could execute a manœuvre that required half a dozen





Top: Captured at Lith by the Arabs
Bottom: Welcomed at El Wej by order of the King of the Hejaz

in their case. From the corner of my eye I studied their faces. No sign of suspicion showed.

'Now is the time!' I whispered to Etera in French.

Without haste, as if we were merely moving up to place our big anchor, we hove on the manifa line. Slowly Svaap swung until she was heading straight out of the pass. When we were nearly over our light anchor I went below and slipped the guns up on deck behind the cabin house.

Then things started to happen. The engine, already primed and coaxed, started with a roar - full speed ahead. I flew on deck, grabbed a gun in each hand and put a shot or two over the decks of the dhow. Every Arab dropped out of sight behind the bulwarks of the craft amid a confusion of incoherent shouting. Etera got in the small hook as we slid over it, gathering momentum as we went. A second later we were gliding between the narrow jaws of coral that formed the pass. Covering the dhow all the while, we steered for open water, keeping that bulky craft between us and the village as a shield.

There was a great hullabaloo on shore and a random shot or two as Arab sheikhs in flowing robes rushed about among the crowd on the rocky slopes. The north-west wind prevented the sailing craft from negotiating the pass, so pursuit was impossible. We would not have feared it anyway, for our high-power rifles would have kept us out of range of their ancient blunderbusses.

We were free, but our problems were by no means solved. Our protecting string of offshore reefs had become a prison, confining us to a narrow, shoal-infested strip of water close to this piratical coast. More than a hundred miles of this intricate channel remained, and even then, before we could escape to sea we had to get some supplies somewhere. We did have our flock of chickens, but they were not enough. My conscience bothered me about those chickens. I felt that it was adding insult to injury to not only escape from my friend the Emir, but to carry off a dozen of his best chickens besides. Had there been time I should have returned them to him beforehand.

The only place which offered any chance of getting supplies before we got to Jiddah was Lith, a hundred miles north. The Pilot Book was a bit discouraging about Lith, saying of the inhabitants: 'In ordinary times piracy and robbing the few pilgrims who attempt to pass through to Mecca are added to their usual means of gaining a livelihood.' It neglects to specify what the 'usual means' are, although I strongly suspect it is something nefarious. Pilots and charts are usually unduly discouraging. Half the islands in the South Pacific are called 'hostile', whereas they are the friendliest people imaginable. Therefore I did not take the warning too seriously. Besides, piracy or no piracy, we had to get food.

One evening, after three days of nerve-racking navigation, we found our way through a winding passage into the inner anchorage of Lith. It was a great disappointment—merely a small settlement of squalid mud houses, instead of the populous town we had expected. As at Khor El Birk the shore at once disgorged upon us a boatload of truculent Arabs who tried to inveigle me ashore. This time I was not so easily caught, and they finally left. We were tired, and

soon turned in for the night, sleeping on deck.

Our ship's clock was just striking the eight bells of midnight. I awoke with a start and thought for a moment that I was having a nightmare, for I looked into the muzzles of a motley assortment of firearms. A smoking oil lamp was held on high by a bulky, black-bearded giant with one eye. The flickering light fell on the wildest looking gang of pirates I ever hope to see. There were more than a dozen of them, and more waiting in the boat which lay alongside. Every man of them was a walking arsenal, bearing rifle, revolver, and one or two knives or a sword.

There was no temporizing with this crowd. I tried to joke it off but instantly realized that these were not the polite captors of El Birk. They simply poked a gun in my ribs and took me along without even letting me dress, although I did slip on a bathrobe.

Two stayed to guard Etera, who was speechless with fright. As we rowed off I shouted what I fully believed to be my last instructions to him: to try to escape on some passing dhow and tell the story to the first European he met. Somehow, I felt very melodramatic at that moment. I was certain that I would never see *Svaap* again, and I kept my eyes on her until she faded into the black of night. This was the end, I thought.

Three horses were waiting on shore, beautiful Arabian steeds, without saddles. I have always dreamed of riding a real Arab under the stars of Asia, but never in my wildest fancies did I imagine such a ride as I had that night as we galloped bareback over the rolling desert sands. In front of me rode the chief, his white mantle fluttering from his head like the wings of a phantom. Immediately behind me rode the guard, brandishing his old French musket toward the middle of my back. I quite expected a shot at any moment, and curiously enough was quite calm about it, wondering what it would feel like when it came. I believed that I was being taken out in the desert to be killed where there would be no trace. Then they would go back and scuttle the poor Svaap. I learned that night what a condemned man feels like when he is being led out to the gallows.

My predominant thought was that no one would ever know what had happened. This worried me very much. People would say 'I told you so, the boat was too small. It was a foolhardy thing to try to sail around the world in that boat.' I did so much want to complete the trip successfully to demonstrate that it was not foolhardy, that a

well designed and built small boat could go anywhere safely

if properly handled.

On and on we galloped, over rolling desert dunes. The hot wind was oppressive. The stars shone overhead. My long bathrobe flew ridiculously in the wind and I began to have painful reminders that I was unaccustomed to this form of violent exercise, not to mention the fact that I had never ridden bareback and stirrupless before. I longed to reach our destination, whatever it was.

After a while we came to a lone, grotesquely dwarfed tree, where we stopped. The guard gave a peculiar cry which was answered from somewhere in the dark. My heart beat rapidly, for I thought that this was to be the spot. But then a man appeared, examined us, and we moved on. Then we came to an oasis with a considerable settlement. There, grimly commanding its surroundings from a rise, stood a low, square, turreted fortress with round towers at the four corners.

A few minutes later I took stock of my situation from a suffocating low cell in the fortress. There was no window or opening in the wall of any sort except the heavily barred door through which I had entered. There was not a single object in the room. The only break in the monotony of the four walls was a niche cut in the stone of one side, deep and long enough to form a sleeping shelf. A few rays of light filtered through a small aperture in the door, from a lamp hung outside. There was no possibility of escape.

In this hopeless condition I languished for what seemed a week, unable to distinguish day from night. Occasionally some peculiar tough bread-like substance was passed in with foul water. Eventually some important Emir or Sheik arrived and examined me. We talked for hours, but as there was no interpreter I do not know what it was all about. As a matter of fact I have never, to this day, understood the whole affair. There was no effort to take Svaap. I was

never even searched. No effort was made to get ransom. I believe they got cold feet for some reason or other.

I was almost disappointed, eventually, that it all ended as tamely as it did. From a beginning that surely rivalled any *Arabian Nights'* tale, my adventure tapered off to an anticlimax.

I was allowed to go back to Svaap under guard to get some very important diplomatic papers I claimed in sign talk to have. With the aid of some old bills of health, plenty of red ribbon and sealing wax, I hurriedly manufactured some of the most awe-inspiring documents ever seen. I had no seal with which to stamp the sealing wax, but used the ornately figured cut-glass stopper from a Coty's Eau de Cologne bottle. This made a very impressive seal. These formidable documents so impressed the Emir that I was not returned to my cell, but was to be detained in port indefinitely; why, I don't know.

I soon found that the chief of the guard hated the Emir. Judicious bribery made him my ally and we were able to get supplies aboard. A large Arab dhow lay alongside with a cut-throat crew of part-time pirates and slave-runners. The captain, an enormous jovial Arab, squeezed himself into all possible corners of Svaap, exclaiming like a child over a new toy at all the curious things he saw. I gave him some charts which delighted him beyond measure. We became great friends, my pirate captain and I.

So everything was prepared for escape No. 2 — probably the best-directed, most thoroughly sure escape ever known. The chief of the guard, in order to repay the Emir for some past injury, agreed not to guard us, although we could not leave openly by daylight, for there were some members of the garrison who were faithful to the Emir. This was where the dhow captain came in. He knew the reefs like the palm of his hand, and would lead us out by night.

That last night will always linger in my memory. It was

the only time I saw Arabs throw off all restraint. We were aboard the great clumsy dhow, we three conspirators and the entire crew of the dhow - a wild, fearsome crowd. Drums were produced, and all night long we sang and danced to strange tempos, drinking of a peculiar aromatic liquor. Different members of the crew burlesqued as women and performed weird evolutions. Even the gigantic captain did his bit, throwing off all but a loincloth and violating his corpulent body in a sword-dance. It was something like the one I had seen at Makalla. But this time the gun in my pocket was an unnecessary caution. I even felt ashamed that I had brought it, for these good-natured pirates had accepted me as one of them.

The east was beginning to streak a little with a warning of approaching dawn when the great sail of the dhow creaked its way aloft and I bade farewell to my new found friends. They got under way before a gentle desert breeze and we followed close upon their heels in Svaap, twisting and turning in a serpentine path through the unseen reefs. Dawn was breaking when we left the outer reefs behind. We headed north, and the dhow turned south.

A last farewell came floating across the purple water from the gigantic Arab sailor whose heart was solid gold. 'Salaam, America, Salaam!'

CHAPTER XXV

ETERA had been pretty weak after the El Birk affair, but now, as a reaction to this Lith adventure, he collapsed entirely once we were safely out to sea and fell into his bunk with a high fever. He was convinced that we would not survive the Red Sea.

'We will never reach Suez,' he groaned in his ungrammatical French, 'and I will die before seeing again my beautiful Tahiti.'

'Things,' I philosophized, 'are always blackest just before the dawn.'

For two days and nights I nursed Etera and sailed the ship. On the third day I wearily beat into the reef-protected harbour of Jiddah, and thankfully dropped anchor off a walled city of tall white buildings. Then I slept.

Fortune favoured us in Dr. Suity, a little French-speaking Syrian doctor who gradually coaxed Etera back to health.

Gracious King Ibn Saud, who is building himself a powerful kingdom there in the Hejaz, gave us his personal protection for the rest of the time we should be in Arabia. He notified all towns along the coast to do everything they could for us in case we should stop, and when I left I had a letter from him to show in case of any further trouble.

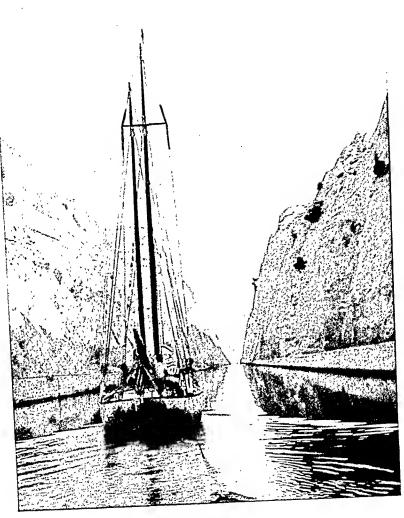
While Etera was recovering I was able to witness the great annual pilgrimage to Mecca, and through the help of Arab friends made while in Jiddah got as close to the 'Forbidden City' as 'any non-Mohammedan can go and live to tell the tale. From the crest of a hill I have looked upon the sacred city which every Moslem hopes to visit at least once before he dies.

In Kamaran I had met K. S. Twitchell and his wife as they were passing through. Now, in Jiddah, we again met through peculiar coincidence, and saw a great deal of each other. They are Americans, with one of the most interesting jobs I know. Twitchell is what might be termed an exploring engineer for Crane, an American who engages in practical idealism. Basically it is a form of philanthropy - but it goes far beyond ordinary philanthropy. Crane, through his field engineer Twitchell, does pioneer work in backward countries. He works in co-operation with the local government - opening up the country by road and bridge construction, laying in irrigation systems, installing modern agricultural methods, sanitation, and so on. He instructs the natives in this work, and when they are capable of carrying on themselves, moves to new fields. Mrs. Twitchell, a slender, frail-looking woman, accompanies her husband in this exhausting work, surviving almost inconceivable hardships with more fortitude than most men. It is a marital partnership such as one seldom sees.

Crane's Arabian campaign is still in its first stages. Abyssinia was recently completed. Here is a philanthropy that is productive and everlasting, that leads the way by showing recipients how to better themselves, and thus builds for the future. When I compare this sort of work with the fundamentally destructive, unintelligent efforts of the various missions in the South Seas I wonder that more people have not asked themselves the question: 'What is Christian service to backward peoples?'

We still had half the Red Sea before us, and no hope of anything but headwinds. So before leaving Jiddah we took aboard in our tank and in tins one hundred gallons of petrol, and hoped that calm intervals in the almost perpetual northerly winds would give us a chance to forge ahead under power.

On the 29th of April, 1931, we sailed, expecting to stop



Nero's canal

once more in Yenbo for supplies. There were no protecting reefs now, so we had no alternative but to get out and buck the headwinds in the open sca. Day after day we plugged along, against heart-breaking conditions. For three days we were hove to in a north-west gale, sighting Africa twice. Steamers tried to run us down and off-lying reefs presented a constant danger. Finally we gained several hundred miles and reached another section of the Arabian coast with a reef-protected inside channel.

Then came days of bewildering navigation. Strange freaks of atmosphere hid near-by islands from sight, and suspended distant ones in mid-air, upside down in mirage. My head ached from the strain of secking intricate channels in the uncharted coral.

We finally reached Wej, our last Arabian port, and there, to my great amazement, met the Twitchell expedition again. Also, the Emir had received a radio broadcast from the King of the Hejaz instructing him to do everything possible for us should we happen to stop there. So now, with the extra advantage of Twitchell's interpreter, I learned that Arab hospitality has no equal when you are known to be a friend. The Emir, an impressive man with the bearing of an hereditary ruler, and painted eyes, received me in state in his palace.

'The town is yours,' he said, 'to do with as you wish.'
And so I came to see Arabia from the final angle: that of
the honoured guest, under the personal protection of the
King himself. I certainly found complete adventure in
Arabia.

The temptation to stay and join the Twitchells on an expedition into the interior was too much for me. I stayed. We were accompanied by the Emir and his bodyguard: a jovial crew of gowned ruffians all armed with rifles, sidearms, swords, and double cartridge belts slung Sam Browne fashion. Even the Emir had all but the rifle, and that was

321

carried for him. There had been a recent Bedouin attack

and another was expected any time.

It was a grand picnic for the Arabs - a mad turmoil of departure through streets that were made for goats, not cars - accompanied by riders on magnificently caparisoned camels. Our cars were the first to be seen in Wej, and created great excitement.

There followed an inconceivable dash over the desert at top speed, for an Arab chauffeur's idea of driving is speed, more speed, and still more speed. There was no road, and we flew over hard sand, through brush, over rock piles and soft sand, across and up long defunct river beds, anywhere and everywhere. The springs hit bottom like pile drivers and we hit the top in similar fashion. I wondered how man-made machines could stand such abuse. They were Fords, half a year old, soon ready for the junk pile. I now understood why the Ford agent in Jiddah told me that the life of a Ford in the King's service was six or eight months.

Many miles we explored, into an almost unknown, uninhabited portion of Arabia, examining the possibilities of development for the King of the Hejaz. Reluctantly I

left the expedition and rejoined Svaap.

Something of Arabia had got into my blood. I longed to see more of this vast mysterious country, which once bred a race of conquerors who built the greatest empire of their age. But time was beginning to count in my life. I had a July rendezvous in France with one of my family, and I was determined to see the skyline of Manhattan before winter set in.

We again tackled the Red Sea. Our experience with the weather in the centre caused us to go reef-crawling again whenever possible. We made more progress this way. Like a battering ram pounding at the gates of a medieval fortress we hammered away against our indefatigable enemy the north-west wind, gaining slowly but surely.

At last we entered the Gulf of Suez, still fighting for every inch with both power and sail, almost on our last gallon of fuel. There, only 25 miles from Tor, safety, and fresh supplies, we nearly encountered disaster.

We had entered the Strait of Jubal. Asia and the Sinai Mountains towered abruptly behind a rising slope of gorgeous sand. Across the way lay Africa. We were surrounded by dangerous reefs. At 4 p.m. there was a sudden shift of wind and a strange yellowish cloudbank bore rapidly down upon us. I felt a sudden premonition and sought shelter behind an off-lying reef.

It was a sandstorm, the first of our experience, and I hope the last. For two hours we were buried in a yellow murk, while wind of hurricane violence tore at us. With both heavy anchors and full scope on both chains we rode it out - expecting momentarily to be broken from our shelter. The air was full of sand, driven along like fine snow in a blizzard. It was one of the most distressing experiences I have ever had, for one could hardly breathe. Although we closed all the hatches we later found the powdery grit everywhere, even in the most inaccessible corners of closed lockers. During the storm the visibility was zero, although the sky overhead was fairly clear and the sun shone faintly through as a pale globe. When it was over the decks were covered with fine sand and we were nearly blind and suffocated. I hate to think what would have happened to us if we had been caught under way in that reef-infested gulf.

The next day we anchored in Tor, the biggest quarantine camp in the world. With fresh supplies and petrol aboard, and a light heart, we set out for Suez — only twenty-four hours' sail distant under good conditions. My jubilance was short-lived, for after we had made a few miles our Nemesis, the nor'wester, came driving down upon us, unwilling to admit defeat. We fought for a night and a day, a gruelling,

pounding, heart-breaking fight. We could not gain a mile. Then we sought shelter behind Ras Gharib lighthouse.

For nine days that wind swept down the gulf without abating, and I became a regular boarder at the lighthouse. Etera refused to leave Svaap. Those awful looking beasts (camels) that he saw ashore appalled him, and I could not convince him that more Arab pirates were not lurking behind the sand dunes to fall upon unwary Polynesians. Not until we reached Suez would he set foot ashore. As a matter of fact he never moved off Svaap for two months—from the time we left Aden until we got to Port Said. I think it was the worst two months of his life, spent mostly in the deadly fear of the Arabs. Towards the last he believed that he was going insane. He broke down and confessed to me that his head reeled with beaucoup des histoires.

I was weary of it too - from the constant presence of danger from both man and reefs. It had been a gruelling test. But I now felt relieved with Suez only around the corner. I sought relaxation during those nine days and once again went exploring on the desert, an African desert this time, with the world's worst mount: the camel. These were racing camels, that can cover the ground with the most amazing rapidity and most distressing motion. They have only two movements, a walk and a pace. When you let them out they can keep up this high speed gate-legged pace indefinitely, and beat the fastest horses over anything but very short distances. You have a double pommel saddle affair constructed so that if the front horn is not about to disembowel you the rear one is gouging pieces out of your spine. There is a small chain round the beast's neck with a rope attached to steer with. To go to right or left you pull in the corresponding direction. To accelerate you beat the animal with the rope's end. To stop you heave with all the strength of your two arms. As for the method of riding, there doesn't seem to be any - you just take the beating as

easily as you can and pray for the end of the road. The least that can happen is to find your spine out of joint, as I did after two or three days.

On the ninth day the wind abated somewhat and we got under way once more. It was only 125 miles to Suez, but even so it took us three days to get there, hove to part of the time, plugging away incessantly against the steep vicious seas when the weather was not too heavy.

It was Saturday, May 23rd, when we at last reached Suez. For three months we had seen practically nothing but the sea, endless wastes of sand, barren hills, and scorched mountains. My strongest impression of Suez is the exquisite delight I had in filling my lungs with the breath of trees and flowers.

For months our very lives, almost, had been devoted to a single thought: to reach Suez. We had been warned many times that we could not do it. Often I had been almost ready to give up. At Jiddah we had received news of a larger yacht that we had met at Aden. She had much more power than Svaap. She had attempted the same voyage and failed. After weeks of battling against the head-winds and seas she had returned to Port Sudan where her owner put her upon a steamer and shipped her to Suez.

And now, although I could hardly believe that it was true, we had succeeded in completing the most difficult lap of our trip, a voyage that has rarely been accomplished by sailing craft. My sleep that night in Suez rivalled that of the great pyramids out there across a few miles of low Nile-lands. Only the Mediterranean and the Atlantic remained.

CHAPTER XXVI

Arrived Port Said after strenuous Red Sea Voyage — Will Meet you Villefranche France noon, July Twenty-third.

Never in all the three years of the voyage had I promised to arrive anywhere on a certain day. Fate and the elements control the movements of a small sailing vessel to a greater extent than its skipper. But now, bursting with confidence at having conquered the Red Sea, I looked forward to the mere Mediterranean with a feeling of superiority. In a weak moment I sent the above cable to my grandmother who had come over to meet me in France, fulfilling a promise made at the beginning of the trip. As soon as the message was irrevocably on its way I regretted my bravado. The sailor's superstitions which even I, with my methodical, scientific mind, had absorbed from long association with the sea, were aroused. I knew I never should have made that rash promise. Having made it there was nothing for it but to try and carry it out.

After passing through the Suez Canal, Svaap was over-hauled at Port Said, largely through the kindness of Monsieur Maurice Lauzanne, of the Suez Canal Company, who placed the great workshops at my disposal. Then, glistening in her new paint and flaunting a new suit of sails, the little ketch put to sea again. Soon hospitable Port Said and the coast of Egypt dropped below the horizon and we set a course for the Greek Islands. I was on my way to fulfil another of my dreams: to invite my soul upon the ancient shrines of Athens, Corinth, and Delphi.

The voyage was in its last stages now. Success was

drawing nearer. I began to live in a little circle of suspense. So many undertakings I knew of had failed with the goal almost in sight. Was mine to be of that sort, I wondered, or was that magnificent self-confidence which I had developed to result in successful completion?

Those gods that I had outraged in my arrogant cable lay in wait. Approaching Kaso Strait, between Scarpanto and Crete, where we would enter the Cyclades — the archipelago of Diana and Apollo, we were met by a screaming northwest gale, dead ahead, and for one solid week battled to get through that narrow body of water.

Finally we gave up and sought the shelter of mountainous Crete, and coasted along its southern shores. Even here we were not secure, for gusts and whirlwinds of great intensity shot off the mountains upon us. One of these blasts did a peculiar thing. It whipped the full length of our heavy tarred trolling line out of the water and flew the spinner in the air like a kite. This will give some idea of the force of the wind.

Passing Hierapetra and other towns of ancient Roman history, we came to the 'Leon' promontory of the ancients. It resembles a crouched lion greatly. Just beyond was the little rockbound port of Fair Havens, where St. Paul anchored his ships, and then we crossed Messara Bay where he was wrecked. St. Paul was evidently not a navigator, for he tried to make this crossing at the most imprudent hour of all—the early morning when the squalls are most violent. We chose night, and had better luck.

Dawn was magnificent, the valleys and gorges dispelling their blanket of night in spectacular colours. Before us lay the little town—ancient Phænice—now Port Lutro, nestling at the foot of abrupt mountains by a tiny cove. It clung there to the side of a cliff quite placidly. Ancient ruins threw jagged shadows from heights here and there, and soon the water took on an intense blue, and reflected the

whole scene inverted. We anchored close in, a stone's throw from the beach.

Next day we sailed on past the spectacular 8000 foot Madara peaks with their sweetly smelling fir and cypress vales, and came to the western end of Crete. My usual persistency asserted itself and again we tried to get to Athens, a flank attack this time, via the Antikithera Channel. Our old enemy, the nor'wester, was caught napping. We recled off a hundred miles before another storm forced us to seek shelter in a cove south of Sparta, on the Peloponnesus Peninsula. I felt quite at home, for this mountainous land that stretched away before us was Lacedæmon, the kingdom of King Menelaus, with whom I felt as if I had at least a speaking acquaintance.

A little two-masted Greek schooner was already there. Later a larger one staggered in, mainsail gone to pieces. I was convinced that the God Poseidon, Odysseus's enemy, was taking revenge upon all sailors for the final escape of that amorous hero from his clutches. The Greek sailors told us that this weather prevailed nearly the whole year, the best time being in May and half of June. Not until a splendid easterly breeze came along did we stir. Then we sailed to Athens.

On the night of the full moon another dream came true when I stood upon the heights above Athens and gazed out over the great city. All about me fell the moon-shadows of the Parthenon. I put out a hand and it touched cool marble. Perhaps Plato had leaned against that very pillar. Spellbound by the beauty of the magnificent ruin, I offered homage to the minds capable of that glorious conception, and to an age of glory that carved the spot in history for all time.

Nineteen hundred years ago Nero saw the advantage of

a canal through the narrow neck of land that connects the Greek mainland with Peloponnesus at old Corinthus. He commenced the canal but did not live to finish it. In 1882 the present canal was started and reached completion eleven years later. Next to Panama, it is the most spectacular canal I have seen, a die-straight slice cut through a rocky hill.

On July 2nd we paid 345 drachmas (\$4.60) and went through under power. On both sides towered sheer perpendicular walls of rock — leaving only a slit of blue sky high overhead. Then we came to ancient Corinthus. From there we steered for Mount Parnassus, and entering the Gulf of Salona anchored off Itea. High on the slopes of Parnassus, almost in the clouds, lay Delphi — a diamond in green velvet.

Delphi sleeps in a setting beyond compare, dreaming of its past glory when it was the heart and treasure of the cultured world. Surrounded by its magnificent mountains and valleys it gazes down on the vast pale green leagues of the Holy Olive forest.

Standing before the altar of the Oracle of Delphi that evening I whispered a question, half to myself, half aloud—in the hope that the Oracle might hear. It was the destiny of Svaap that I sought: success or failure?

There was no response, but a moment later I saw a falling star. Straight into the West it fell, where lay the goal of our voyage. Do I believe in omens? I am not sure. But I think I believed in the augury of that meteor with all my heart.

Sunset had been a wicked scarlet, but now the dawn brought in a soft scented north wind. Cephalonia and Ithaca loomed grey-blue out of the night. Straight for the heart of Ithaca we sailed, into the cleft which nearly divides the island. We left the sea behind, crept between steep hills through the portals of the inner harbour to find the town of Vathy circling clean and white around the land-locked bay.

L*

Blue-painted Grecian craft were moored to the quay. My wandering eyes lifted to the slender cypress groves on the hillsides, to the mountain village with its windmills. Vine-yards and olive groves meandered through the valleys, and snakelike lines of terracings (laboriously built of stone and rock) ringed the hillsides. The people gathered on the waterfront to welcome us. I had come to the last of my ancient shrines—the home of Odysseus.

Ithaca, the island, and the people, all radiate peace and content. The beauty of the place reflects itself in the eyes of the inhabitants. My main interest was in searching out the scenes of the Odyssey. To do this I stayed on for many

days and came to love the simple folk.

There is no class-consciousness in Ithaca. Of all the places in the world which I have visited, this little Greek island is the most truly democratic. One day I was about to take a picture of my friend John Callinicos and his sister. They were both in their teens — children of Ithaca's richest family. I was about to snap the shutter when John's features lit up. Two peasant girls — road workers — were coming down the road carrying heavy loads of dirt and cement upon their heads.

'Wait,' cried John, who spoke English, 'here come our friends. You must take them too.' And he called to them to hurry and be in the picture. Nothing would do but that they all be photographed together: the rich boy and girl in their fine linens with their arms around the ragged peasant

workers.

The Greek islands have an unsavoury reputation which is unjust. Everywhere I went among them I found hospitality and a desire to be of assistance. When I bought supplies I paid no more for them than the inhabitants. Strolling through little Greek towns I would be invited in by each poor shopkeeper to partake of wine and cheese with him. Everyone had a smile of welcome. It was something like Polynesia again.

The evening before I left Ithaca I climbed to an ancient Cyclopean watch tower, built of gigantic slabs of rock two thousand years before Christ. From this very spot Penelope had watched for the return of long-absent Odysseus. Across the bay towered Neritus, the mountain Athene pointed out to him when he could not believe that he was really home at last. And the sun set in glory over the hills beyond the bay.

I don't think there were any gaols in Ithaca. Or else the people were too good-hearted. At any rate Etera remained a free man during our stay although the stunts he perpetrated had put him behind bars more than once elsewhere. He got drowned in a wholesale fashion in Vathy. The sensation he had caused while pearl-diving in Aden, and later in Port Said, made such an impression upon him that he added that stunt to his regular repertoire. The reports I received from the amazed population one evening when I returned to Vathy were rather confused because of language limitations, but it seems he had partaken of considerable Greek hospitality, which is synonymous with strong wine. Later, while performing in the canoe, he had fallen into the bay, sinking like a log. Not knowing his diving proclivities two men had heroically rescued him - much to his disgust. They must have thought he had a suicidal complex, for shortly afterwards he rolled overboard from Svaap (where they had deposited him) and went down three times. Again he was rescued from shore. I guess the rescuers began to run out of dry clothes as the day grew long, so they finally took him ashore and sat on him.

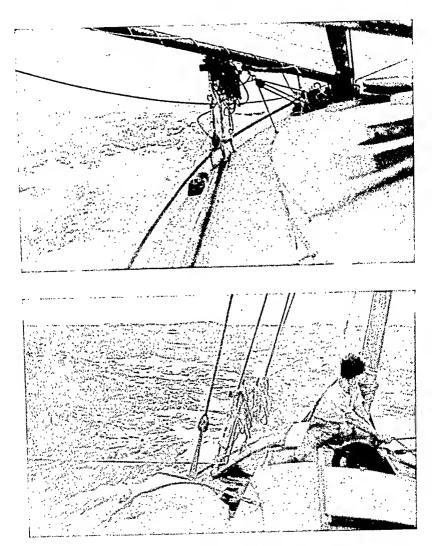
Usually I had to go hunting for Etera when I was ready to sail, unless he was in gaol, which simplified matters. Ithaca, however, proved to be helpful to the bitter end, delivering him aboard in a sack unconscious, with my other supplies. I really thought he was potatoes at first, he was so small. Thus we sailed for Italy, on the 11th of July.

Three days of vagrant breezes followed. Then one morning I came on watch to see the great blue bulk of Mt. Etna ahead. The fates which we had angered by that rash promise to be in France on the 23rd were for the moment busy elsewhere. The current in the Strait of Messina rushed us along and into Messina port so quickly that we had hardly time to glance at the lovely coast of Italy's toe with its little fertile valleys and pink and white villages.

We were struggling with Charybdis. The crag of Scylla looked down upon us from the other side and leered. I do not wonder that the ancients feared the great vortex of currents at this spot. The boat nearly leaped out of the water at times, thrown by the pyramidal waves. Others crashed on deck or threw their crests into our sails. The current was with us and soon we were in clear water. Our hearts were light, for a fresh easterly on our quarter was exactly what we wanted. We set a course for sea-girt smoking Stromboli.

The fair wind lasted half an hour. Then it did its invariable trick of swinging round ahead, and we were soon close-hauled against an increasing sea. Sunset found us abeam the great volcano, and night revealed its fiery torch far out-glaring man's puny lighthouse beside it. How these Italians can persist in living in the shadow of flaming death I can't see; but they do, and when their cities are wiped out they rebuild.

We could not pass Capri without even a greeting, but stopped a while to admire. A slender little white yacht came around the point and we were two. We gazed our fill upon lovely villas perched on steep crags, explored the coast thoroughly, even examining the Grotto Azzur and the great rock-arch on the southern side. It would be pleasant to pass one's later years in Capri — in peaceful contemplation of the blue Tyrrhenian Sea, majestic Vesuvius, and Capri's own brown crags.



Before the NE. Trades

Sunday, July 19, 7 p.m. — This evening the breeze has gone SW. instead of around to NW. and N. as usual with sunset. Fairly smooth sea. The glass has fallen a bit. Very red sunset - a bad sign.

Monday, July 20, 7 a.m. - Glass still falling - from 30.18 to 29.92. All night and even this morning there has been excessive humidity. Total change in weather — freshening SE. wind since midnight. Clouding up. A storm is brewing.

Noon. - Glass continues to drop - astonishing confused sea running. Not a breath of wind. The calm before . . .?

4 p.m. - Down to 29.82 and still going! The wind came at 12.30 from SE., has increased and gone through south to SW. and the heavy swell from NW. mounts continually higher. In hurricane regions we would be preparing for one, for there are all the symptoms, even the storm clouds radiating from one central point. We are working offshore to get as much sea room as possible, for this coast is barren of ports.

7 p.m. - SW. gale. Most dangerous sea we have been in for a year. We are fifteen miles off the mouth of River Tiber and Rome. We are in a dangerous position. Another bad sunset. Glass 29.79 now and still falling. We sure do get the breaks. We have not had a fair wind since we left the Indian Ocean. Took the biggest sea aboard at 5 p.m. Svaap has ever had - whole forward part of ship under green water.

I had expected something pretty bad, but never dreamed that it would blow with hurricane force as it did. By night the seas were breaking completely over little Svaap and we were lashed to the ship so as not to be washed overboard. Hatches were battened down and everything movable had been put below or strongly lashed on deck.

Here was a situation different from that during our first

big Atlantic storm off Cape Hatteras. Here, on a lee shore, we could not heave to, or ride to a sea anchor, for we would be slowly driven astern and end up on the rocky coast. Had the gale lasted long enough from the same direction we would have lost the ship. During the worst we were losing ground. Under the conditions the only way to save her was to carry enough sail to drive her, to keep moving forward into the fury of the storm. I doubt if ever a small ship has been so mercilessly driven and beaten as Svaap was that night. Luckily we had brand new sails. Otherwise they would have exploded into bits. We carried jib and mizen and she buried her lee deck steadily and groaned and laboured like a thing in agony. Hove down so far by the force of the wind she took those crushing blows on her sweetly rounded hull where they lost their destructive force. As it was we were under water half the time, and it seemed as if the shock of each sea must surely drive the masts out of her.

She was fighting for her very life, and what a glorious fight it was! Close astern lay the cruel black rocks — waiting. Once the jib, under immense strain, started to break away from the stay and we were at the crisis. If it went, we lost our chance to fight. I spent ten minutes on the bowsprit at the end of a rope, completely under water most of the time, coming up gasping for air between seas. But the sail was saved.

During the height of the storm that night, when things were looking blackest, I gave the helm to Etera and tried to rest a little. I clung to my berth and watched the moon lurch past the porthole in sickening arcs as the ship groaned and tried to stand on end and beam at once. The gale shrieked in the rigging. Bilge water rushed about threateningly. An inch and an eighth of wood between us and Eternity!

I was in one of my rare moods of doubt. Why should I

choose such a life, I asked, and called myself every kind of a fool, while all the time I knew that I would yearn for it all again when I had been a little while on shore. Something makes me want to fight the elements, to endure hardships, to feel the great luxury of sailing into a strange and beautiful port when it is all over. I am always seeking beauty: in the storm itself, in the sunrise, in the scintillating sea and far places — always beauty and nature. And so the ship strained on, the seas crashed overhead, and I lay there and knew that I loved it.

The lights of Fiumara Grande shone out to us from shore. If they grew clearer, nearer, it would be only a question of time. The night wore away. At times the lights were closer. At times we seemed to hold our own.

The very worst sea of all roared down upon us at dawn—a dirty green monster that broke just as it reached us. Pandemonium was let loose. I had turned the wheel over to Etera. He was lashed by a short length of rope to the mast, but I was free, doing something up forward. A single leap took me six feet into the rigging. For a moment I could see no boat at all, only swirling angry water with masts and rigging projecting. Then the cabin and deck emerged like a submarine rising from a dive, and Svaap freed herself from the deluge. Etera was gone. The wheel spun free. Then he too reappeared, sputtering in the water and grasping for the rail, still on the end of the rope. I pulled him back aboard.

It had been the last threat of the storm. After that the heart seemed gone from it, and by noon the next day we were tearing past Monte Cristo with just a whole sail breeze, resting by turn from our ordeal of the night. My kingdom had tottered a bit, but now, the battle won, we were again off on our way to France and our rendezvous. I had given up all hope of making it on the 23rd, and then, with 200 miles more to go, and only two days left, we at last got the

lucky break we had waited for so long. The wind came out of the north-east, a fair wind. We rounded the tip of Corsica and drove on for the Italian Riviera. Mentone. The French border. Monte Carlo. Cap Ferat! . . . I felt as if I had come home at last. In every harbour lay shining yachts, large and small. I smiled to myself and thought that probably not one of them, in spite of handsome crews and the millions of their playboy owners, had gone so far as jaunty little Svaap.

It was just noon, July 23rd. We rounded the Cape and there lay Villefranche, tucked away at the foot of the mountains. Venturing into an artificial basin seeking a mooring, I suddenly realized that it was the Military Basin, and headed out again, afraid of restrictions. Just then a man dashed out on the pier and shouted in American:

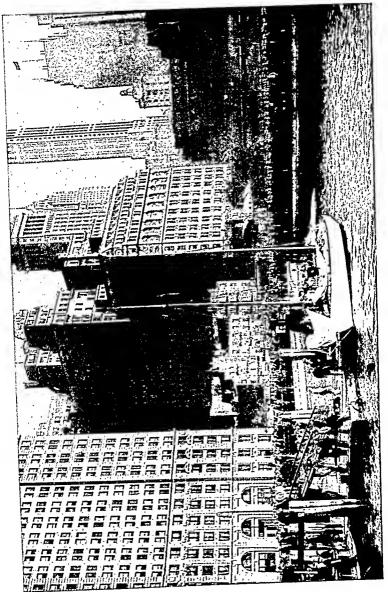
'Robinson? Well for God's sake don't go! I've got your

grandmother in tow!'

With a mighty splash the anchor went down exactly where we were, restrictions or no restrictions. It was twelve minutes past noon. I had almost kept my word after all.

I had once tempted fate by cruising the West Indies vicinity during the hurricane season which lasts from July through October. Having missed by only two days the great 1928 storm which spread ruin and death through Haiti and Jamaica I planned not to take another such chance at the very end of the voyage. I decided to time my Atlantic passage to reach the other side in the middle of November. It was close figuring — between the hurricane season and the beginning of the winter storms on the North Atlantic — but it could be done. Best of all, this plan gave me six weeks in France.

Etera got in so many jams from which I had to extricate him that I lost count. He quit regularly each week and I



reefed jib. It was a typical Gulf storm, blustery, rainy, with the temperature down below 50 so that we two refugees from the tropics nearly froze. Then it blew itself out and we reached hospitable Minorca in peace.

Finally, on September 11th, we said farewell to these delightful isles and left for Gibraltar, encountering severe weather. We found more unadulterated perpetual rotten weather in the Mediterranean than I thought possible. In spite of it we progressed, and finally reached Gibraltar, our jumping-off place. At last we had a real ocean ahead of us again, instead of miserable small seas with undependable weather and ever-present dangerous lee shores. First 700 miles to the Canaries, and then 4000 to America via the north-east trades.

I was beginning to live with a feeling of suspense. Success lay just ahead. My dream was nearly complete. Only a belated West Indian hurricane could defeat us now — and even with that I felt we had an even chance.

SHORTLY after noon on Saturday, September 19th, 1931, Gibraltar faded into the haze of distance and we saw Europe no more. Later we passed close to Cape Spartel, the north-west point of Africa, but with a powerful Levanter blowing we soon dropped that astern and out of sight. Then we were at sea. The glass was dropping, so we made a safe offing before setting a course for Teneriffe, in the Canaries.

Those of you who are not navigators will probably wonder why we sailed 5000 miles on a roundabout southern route instead of heading straight across from Gibraltar to the American coast, a much shorter distance. It was because we would have encountered headwinds, and cold, stormy weather. It would have been a difficult and dangerous voyage. By crossing farther south, in about latitude 30 to 35, we could have avoided the bad weather. But as that is the region of the doldrums, we might have wasted weeks lying in oppressive calms and experiencing severe squalls.

Therefore we had to go still more to the south, seeking the region of the north-east trade-wind. To do this we headed down to the Canaries, and thence still farther south until we were in latitude 20 North. Nearing the West Indies and the western limits of the 'trades' I planned to swing gradually north again, into the variables, and make a landfall just south of Cape Hatteras, at Morehead City, North Carolina. That would be along toward the middle of November, and North Atlantic weather at that time was apt to be bad. I dread the foggy approach to New York, for there was great danger of being run down in those congested waters. And it would be very cold up there too, at

sea in a small boat, so the sooner I could get off the ocean the better. Hence, I planned to say farewell to the sea at Morehead City, and go north via the Inland Waterway system to New York.

We reached Teneriffe in eight days, experiencing one severe south-west gale, and several days of head-winds when

we should have been having fair weather by rights.

We stayed in Teneriffe only long enough to fit the ship for the ocean passage. We had no squaresail now — and I regretted the fact that I could not afford a new one. We did, however, make a new spinnaker, and replaced almost all the running rigging. I bought 100 gallons of petrol so that we could push through the doldrums into the variables when we had lost the trade-wind. As a matter of fact we found the weather strangely upset and had to run the engine for two or three hundred miles to get out of a region of doldrums half-way across, in what should have been the heart of the trade-winds.

The judicious use of an auxiliary on a trip like this can be a great economy. We could not carry more than 100 gallons of fuel, so our cruising range under power was negligible on a 4000-mile voyage. But by getting us through local calm areas in a day or so, when we might have remained there for days, the little Kermath saved its cost many times over in reduced consumption of supplies and wear and tear on the ship. I would never go on an extended cruise without an auxiliary. The ability to enter difficult channels which would be impossible under sail, the elimination of annoying waits while becalmed — perhaps for days in sight of your goal, and the chance of exploring rivers and inland waterways, are too important to let one be sentimental about having a boat that is 'all sail'.

I had to shanghai Etera away from Teneriffe, where he got into even more than the usual amount of trouble. He is the only man I have ever known with the ability to go

anywhere in the world without a word of the local language, or a cent of money, and get unlimited liquor. On his first night out in Teneriffe he rolled aboard with a case of wine.

'But, Capitaine!' he protested with injured innocence next morning when I made him take it back, 'it is for sauce to cook fish in.'

The next night he landed in gaol. I think I have bailed him out of every gaol this side of Tahiti. I got so that upon arrival in a port I usually notified police chiefs that they were about to have a customer, and to fine him as little as possible because I would have to pay it. Sometimes I would let them take care of him until I was ready to sail—then I would know where to look for him.

In Teneriffe I got him out a day too soon. He escaped at the last minute, and for two days the police combed the town in vain for him while I tore my hair and delayed our departure at a time when every single day lost meant increased danger on the North Atlantic. The second night when he thought I was already alseep he came merrily aboard to get his favourite sun helmet. Perhaps he expected to captivate with it the little Canary Island charmers. I captured him and kept him aboard by force.

When dawn came we inauspiciously left for America. Not a soul knew we were going to cross the ocean. No one saw us leave. The little thirty-two-foot boat simply hoisted her sails and moved out of the harbour with less ado than a Star boat going out for a sail on Long Island Sound.

When I think of it now in retrospect — the calmness with which we went blithely sailing across all the oceans there are — I have to laugh. It simply became a habit. We were so confoundedly confident in Svaap that it never entered our minds to have any doubts. And it was kind of fun to go sailing off like that without the inhabitants being any the wiser. It was like playing a joke on them. Besides, it avoided difficulties in this case, for I was financially em-

barrassed at the moment, having spent my last cent on that petrol, and was afraid that there might be port charges, although we were usually exempted from all that.

The dim outline of the Canary Islands faded imperceptibly into the distance and Svaap, with her crew of two, was left alone on the sea in complete isolation from the rest of the world for thirty-eight days. We followed in the footsteps of Columbus now, for he too stopped at Teneriffe before starting across.

Monday, Oct. 5th - Noon. (2nd day of voyage) - The breeze remained about NNE. last night, hardening up at midnight so that we were forced to take mainsail off entirely. Blew hard till 6 a.m. Heavy seas on our quarter, drenching helmsman. Eased up at sunrise and went NW. at 8 a.m. Calm now.

4 p.m. - New breeze from N. by E. Sea getting up.

Curious haze. Sailing hard under full sail.

Tuesday, Oct. 6 — Noon. — Powerful 'trade' blowing out of NE. No slackening during night. The real trade-wind sky now, with endless procession of white clouds. Higher up is a very windy sky.

7 p.m. — Fresh NE. wind. It gets dark early these nights, and phosphorescence twinkles and spatters from our bow. We are well shaken down into our routine now. When we made the other long passage — to Tahiti — we were way south, directly under Orion. Now it is far to the south of us. Cold.

Wednesday, Oct. 7th — Noon. — We have made 433 miles to noon to-day. Moderate northerly since this morning when it gradually shifted from NE. Small birds still with us. Flying fish.

Thursday, Oct. 8th - Noon. - Light northerly 'trade' with long swell. A large flying fish nearly hit me, struck main-

sail six feet above water, leaving a mass of scales. Rain squall just now spelled finish to our good breeze and ushered in an easterly wind, which means we roll badly now.

Friday, Oct. 9th — 7 a.m. — Midnight blow carried away the halyard of our new 400 square foot spinnaker and this huge sail went adrift, under the ship, finally carrying away also the boom. I waved farewell to it only to find a moment later that it was still with us — trailing aft by the sheet which by the grace of God did not break. I have said that it was not necessary to carry away gear on a well-found ship. It is not. This sail is twice as big as it should have been, and it should not have been up in such weather. The fault is mine — trying to drive her to the limit. We have it up again.

Noon — Hot to-day on account of east wind, which also makes us roll heavily.

Saturday, Oct. 10th - Noon. - Continued fine easterly weather. Ran the whole night under mainsail and small spinnaker. Our bosun birds are with us as usual. They must sleep on the sea.

Sunday, Oct. 11th — Noon. — We have made 940 miles — one week out. Very light easterly. If it does not improve by to-morrow we turn south again. I thought we had come down far enough, but now it seems not.

Monday, Oct. 12th — Noon. — We have finished our first thousand miles, and are pretty well out at sea. Our pair of bosun birds use the yacht as a rendezvous each morning. They circle round and round, talking to us as they fly. We have a pet fish who has been with us all the way from Teneriffe. He is about a foot long, silver and blue.

Tuesday, Oct. 13th — Noon. — Have made only 200 miles in the last two days, but I am not worrying for it is better not to reach the western half of the ocean until the end of the month. We are evidently on the very edge of the tradewind — very light following breezes every day.

Wednesday, Oct. 11th - Noon. - Another 24 hours of

almost calm. We have made only 60 miles, and have turned our bow SW. for we are evidently too far north for the 'trades'. It may be a general calm, but there is no use trying to stick to our course if there is a chance of better winds farther south.

The continued presence of our bosun birds, old acquaintances, now, and the petrels, along with our tame fish—provides daily amusement. The birds can light on the water sometimes and rest, but I fear our ocean-crossing fish will be worn to a shadow. It surely proves that a fish is so constituted that he either needs no sleep or can sleep and swim at the same time. He makes little sorties now and then, after small fry, but flies back home like lightning after these little skirmishes.

Thursday, Oct. 15th - Noon. - Perfectly calm night and an indescribably beautiful dawn and morning. Never, I think, have we had lovelier sunrises than these last few days. And a calm like this in mid-ocean is something powerful. It is very warm these days - even at night - so I am content. The swimming is perfect. When I think of the cold miserable winter that awaits us at home I shudder, and linger a bit longer on the end of my tow-rope when bathing. We sail through whole squadrons of delicate coral-coloured Portuguese men-o'-war now. They are one of the earth's most wonderful creations. Still we are in the doldrums, an astonishing thing for all available advices state that there should be nothing but easterly trade-winds here. The very seasons change, and prevailing winds cease to function that our voyage be as difficult as possible. Ever since the Indian Ocean we have been beset by unfavourable weather. This is the most amazing of all, that trade-winds should join the general conspiracy. I am running the engine to get farther south. All our precious petrol that I meant to save for the variable regions south of Bermuda will be gone. But we have got to get out of these doldrums. The barometer is normal, but I have a hunch that a hurricane is playing about in the West Indies, upsetting conditions generally over this section of the ocean. A tremendously long swell comes rolling out of the west. Only a powerful disturbance could cause this and a complete disorganization of the 'trades'.

We went down below latitude 20 and still were in the doldrums. Then after several days, light breezes began to blow — but from the west — dead ahead. We were firmly convinced that Poseidon was determined to keep us at sea for ever. Westerly winds in the middle of the trade-wind belt are unheard of.

For days we crept slowly to windward, wondering if it would ever end. Even our fish got bored. He went off and left us for two or three days at a time. But he always came back. The pair of tropic birds were with us every day. I think the shore-sighting birds which Buddha speaks of as being used to find the position of ships in ancient times were probably bosun (or tropic) birds.

Not until October 25th did we get a fair wind. Then the trade at last came back, to blow against a mountainous hurricane swell from the north-west — the most enormous I have ever seen. We progressed in a series of jerks, rushes, and hesitations. It could not be called sailing. Sliding down the backs of these monsters we would get a violent backwind that would bring the sails up against their boom-guys with a crash. In the hollows we were completely becalmed. Then we had a visitor. The German motor ship Cleushorn came within speaking distance just after dark one night.

'Are you in need of assistance?' boomed out a deep powerful voice with Teuton accent.

'No, thank you,' I replied.

'Can we give you anything?'

I replied that I would like a time check on my chrono-

meter, which was given. They promised to report us by radio and we said 'Auf wiedersehen'.

The Cleushorn brought us wind, and we ploughed with increasing speed through oceans of Sargasso weed. The squalls began to march down upon us as they had during the western half of the long Pacific run. Our two tropic birds and the fish were still with us every day. When we were about 150 miles from the nearest coast of America we saw our fish no more. Perhaps he was eaten by some gogetter American fish, or perhaps he had a pressing engagement somewhere on the American coast and could not wait. I prefer to believe the latter. This 4000 mile jaunt of his must be the longest authentic non-stop swim on record.

On November 1st, staggering along before an easterly gale with rapidly dropping barometer, we crossed our outward-bound trail and completed a circumnavigation of the world. Three years, three months, and nine days before, at exactly the same hour, 4 p.m., we had passed that way on our trip to Haiti. My Odyssey was nearing completion. Only 825 miles lay between us and our landfall, but I will never forget that last lap.

A wintry gale descended upon us from the north, driving. an icy, never-ending rain. For a week we saw neither sun nor stars - only that leaden ominous North Atlantic sky with its grim racing clouds. Appalling great seas swept down upon us out of the murk - the kind that batter in

ship's bridges.

Svaap was equal to it. Bravely she would perform time after time the impossible feat of climbing to the top of each mountain of destruction. Only the growling crests would rush over the sturdy little hull, while the defeated avalanches would rush off out of sight. And so - by repeating over and over again a single task, she accomplished the stupendous one of riding out a ten-day succession of North Atlantic gales. If I can always accomplish successfully each small have nothing to worry about.

All storms must end some time. This one did eventually, and we crossed the Gulf Stream as it blew itself out in the NE. We were weary and worn, but triumphant.

I have always been very proud of my navigation. My sights told me that we should see or hear Frying Pan Lightship at dawn, November 10th. We did not find it. There was thick forest fire smoke far out at sea, worse than fog.

'An error in the chronometer,' I said. 'We'll hear it soon, the latitude can't be wrong.'

The latitude wasn't wrong. Neither was the chronometer, nor the navigation. I learned later that the lightship had been moved.

When a sounding showed very shallow water I realized that we were already on Frying Pan Shoals, although I had no assurance of this except the confidence in my navigation and the fact that the soundings checked with those on the chart. The pall of smoke that hung over the world hid the near-by land and the sky so that I could not check our position. There we were — two score days at sea — yearning for the land — a stone's throw from it — but quite unable to see it.

We then performed something that is either the finest bit of navigation I have ever accomplished, or else a streak of blind luck.

For 90 miles we groped our way northward through the grey blanket, navigating by soundings and dead reckoning. Although only a couple of miles from land we never once saw it, nor any single aid to navigation, nor anything to indicate that we were only a rifle shot from shore except that we could touch bottom with a sounding lead.

We felt our way along and crept closer and closer to where I thought Cape Lookout Shoals lay. When I could

APPENDIX

Deep Water and Shoal is not a technical book, nor is this a technical appendix. The following are merely brief notes that may interest the general reader.

THE BOAT

Svaap was not specially built to go around the world. She is a fine example of a small modern cruising boat built for offshore use. She

was designed by John Alden, Boston, naval architect.

Svaap is 32 feet 6 inches long over all, 27 feet 6 inches on the water line, 9 feet 6 inches extreme breadth, and 5 feet 6 inches draught. She is rigged as a jib-headed ketch. Originally designed to carry 660 square feet of sail, her mast heights were reduced a little for added safety on a

long voyage, reducing her sail area about 100 square feet.

When I started out she had the conventional lay-out of trunk cabin, and cockpit aft. I found that the cockpit was unnecessary and a great waste of space, so I tore it out when in Tahiti and built an after cabin in its place. This utilized all the former waste space in the after part of the boat, giving me a great deal of storage room and

separate quarters for my crew of one.

Every inch of the interior was available. Forward there was a fo'c'sle about seven feet long, for sails, anchor chain, and spare gear of all sorts. On the port side was a small toilet. Then came the main cabin with my berth, transom seats, a folding table, and my library of some 200 books. Under all berths and seats were lockers. Just aft of the cabin was the galley with its swinging two-burner oil-stove. Then, under the narrow deck between the two cabins, there was the little 10-h.p. Kermath auxiliary motor. Behind it was the after cabin with the berth for the crew, a table, and a great deal of storage space for thirty-two feet of boat.

The jib-headed ketch rig proved ideally simple and safe. I believe that the ketch is the finest rig for a small ocean-going boat. At present I am designing what I think is the ideal variation of the ketch rig for short-handed extended cruising: an unconventional trysail

ketch with auxiliary square rig on the mainmast.

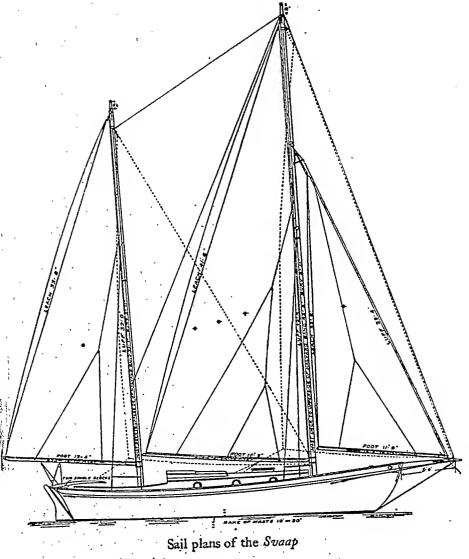
Svaap has a moderately deep hull, easily driven, with three tons of ballast outside on the keel and about a ton inside. She stood more hard driving than any other small boat I have ever seen, and made faster passages than I believed possible in so small a ship. We never could quite do 200 miles a day, but managed to make 190 from noon to noon once, and often did better than 175. My policy was always to drive the ship to the limit, thus getting the maximum of sport out of the game and staying longer in favourable wind systems. The following table of a few of our voyages will give an idea of the time required for long passages under sail in a small boat.

0.0	,	•	
Passage	Nautical miles	Duration	,
Canary Is. — Morehead City, N.C. Galapagos — Tahiti	4000 3700 1517 1282 1050	38 days 32 days 16 days 9 days 16 days 10 days	

Dates of departure from various places

	-							
New York						• •		June 10th, 1928
Bermuda							:	July 19th, 1928
Panama .					•			. Sept. 27th, 1928
Galapagos					•	•		. Dec. 6th, 1928
Tahiti .				:				. Aug. 28th, 1929
Suva, Fiji							•:	
Sourabaya,	Jav	a		•				. Oct. 25th, 1930
Singapore	•							Dec. 28th, 1930
Ceylon .		:			•		•	Feb. 4th, 1931
Mangalore						•		Feb. 20th, 1931
Aden, Ara	bia		•	•	٠.	•		. Mar. 27th, 1931
Suez . :								June 17th, 1931
Nice, Fran	ıce					٠.	٠.	Sept. 3rd, 1931
Gibraltar		. •				. •.	٠.	. Sept. 19th, 1931
Canary Is			:	•		-		Oct. 4th, 1931
Arrived N	ew	Yo	rk	Ci	ty ː	•		. Nov. 24th, 1931

Total distance sailed -32,000 miles. Duration of voyage three years, five and a half months.



STORMS

People find it hard to understand how a small boat can survive the tremendous storms one meets occasionally at sea. Since completing the voyage I have been asked about this continually.

'Why, when I came over last month on the *Mauretania*,' a friend said, 'the seas broke over the flying bridge, lifeboats were crushed, and parts of the rail were torn away! Surely your little boat would never have a chance in anything like that!'

If Svaap were being driven through the water at the rate of speed the Mauretania is, she wouldn't have a chance. She would be crushed like an eggshell, smothered, and buried by the seas in less time than it takes to tell.

The reason that a properly designed, built, and handled small boat can live through a storm at sea is that she is purposely kept from moving through the water at more than a negligible speed. When a huge sea comes along she lifts with it, like a cork or any small floating objects. If it is a breaking sea, she will recoil with it, instead of receiving a terrible blow, for she is light and buoyant.

We once rode out a violent storm in the Pacific, near the island of Vate. It was uncomfortable aboard, but we sustained no damage and were at no time in danger, for we had plenty of sea-room. When the storm was over we sailed into the island harbour and found that the heavily-built seawall had been almost totally destroyed by the seas. The wall was inflexible, like a big ship, and had to take the full, overwhelming force of the waves and simply could not stand it.

NAVIGATION

The science of celestial navigation (ascertaining one's position at sea from observation of sun or stars) has long been fenced about with mystery to the uninitiated. Those who know are apt to make it appear much more difficult than it really is, jealously guarding their knowledge as one would a trade secret. Actually anyone with a normal amount of mentality and education can by serious application teach himself to navigate in a short time. The usual formidable volumes on the subject can be dispensed with. I taught myself the theory and method of modern navigation in the evenings, during the winter of 1927-8. Some of the material I found in the New York Public Library, and some in books which I bought. I believe I found all that was necessary in Poor's Nautical Science, supplemented by

a still simpler layman's explanation in Claud Worth's Yatht Navigation. Although I had learned the theory and the way to apply it, I never used a sextant or worked an actual sight until I put to sea in Svaap. Then it was a case of sink or swim. I am a strong advocate of the principle that the only way to learn to do something is to get out and do it.

At various stages of the voyage I tried different methods of navigation. I found that by far the simplest method, with least possibility of error, is the method the U.S. Hydrographic Office gives in Publication No. 203—The Summer Line of Position furnished ready to lay down upon the Chart by Means of Tables of Simultaneous Hour Angle and Azimuth of Celestial Bodies. The book costs \$2.25. The only equipment necessary is a nautical almanac, chronometer (which is merely a timepiece especially constructed so as to keep a uniform rate), a sextant (an instrument with which to measure angles), a course protractor, and the chart.

In a few words the process is to measure with a sextant the angle between the sun (or star) and the horizon, and to calculate your position in relation to that of the heavenly body whose movements are known, having been plotted long ago by astronomers and put into convenient form in the nautical almanac. Formerly this calculation was complicated, requiring higher mathematics and logarithms. The H.O. No. 203 method eliminates all this, having tabulated all possible combinations of the basic calculation. All that is necessary is simple addition and subtraction, so that navigation is now within

mental reach of almost anyone.

SELF-SAILING

Many men who sail small yachts endeavour to make them sail themselves a goodly part of the time. I am against this practice. Svaap can be trimmed to sail herself easily except with winds aft of the beam. Even then she can with difficulty be made to hold some kind of a course. But only upon rare occasions has Svaap been left to herself in this way. It is simply asking for trouble, for one thing; and furthermore it does not appeal to me, for the simple reason that, except when close-hauled, one must always sacrifice something in trimming the sails to make the boat hold the course. The mizen must be trimmed too slack, or the jib too flat. You do not get the greatest efficiency from your sails. And when I am at sea I prefer to make the greatest possible mileage and get somewhere. So Svaap

was continually sailed twenty-four hours a day, carrying all the sail

she could day and night.

We found it most satisfactory to split the night into two six-hour watches. This gave us both a chance to get one good sleep, something one cannot do with four-hour watches. Sometime during the day each of us would get a two-hour nap, so that we really had sufficient sleep except under extraordinary circumstances.

SUPPLIES AND WATER

People have an idea that it is very difficult to carry sufficient food and water on a trip of this nature. Modern concentrated and tinned foods have so simplified this problem that it is really no problem at all. The main thing is to obtain wherever possible fresh fruits, vegetables, and meats, eating them as long as they last to the exclusion of tinned and prepared foods. Dairy products are rarely obtainable in the islands, so we always had a large supply of tinned milk, butter and cheese aboard. We accustomed ourselves to adopting the local produce wherever we were — foods often strange to our palates, but offering that vital, necessary, fresh quality. As a result of this policy I was constantly in perfect health.

We were always very careful about water on account of the disease it can spread when polluted. When at all doubtful as to the purity of its source we would chlorinate it. Svaap has a permanent capacity of forty gallons in a built-in galvanized iron tank. On the long trips we never consumed more than half a gallon per day per man, using fresh water only for cooking and drinking and brushing the teeth. We washed in sea water with salt-water soap. Thus we had a forty-day supply with a full tank. On long ocean passages we would sometimes start out with a small extra supply in five-gallon petrol tins, but this was always an unnecessary precaution. Even in the heat of the tropics our water never went bad as it is sometimes reported to do, and with the exception of once or twice among the islands when we preferred not to fill our tank with doubtful water, we never ran short.

EXPENSE

Svaap was built in 1925, in Shelbourne, Nova Scotia. I bought her in the fall of 1927 after a long search for a suitable boat that would fit my pocket-book. Reconditioned and equipped to start the trip in June 1928, she had cost me about £400 in all. During the

voyage, which lasted three and a half years, I spent approximately £600 exclusive of a small salary paid to Etera, my Tahitian crew. This included everything, food for two, fuel, repairs and replacements for the boat, charts, etc. Thus it is possible for two men to buy a boat and make a protracted voyage around the world on a total of £1000, but it is not easy. I did it because it was all I had.

The financing was the only haphazard part of the voyage. I had no independent income, but relied entirely upon my writing. The determination to live my dream was so strong that I chanced it, never knowing whether I would have sufficient funds to continue or not. When cheques came through all was well. When they did not we managed somehow — taking passengers occasionally among the islands, carrying a ton or so of freight, or bringing supplies to farisolated officials for the government.

Often, for months on end, we practically lived off the country—fishing, hunting, and bartering with natives. We always did our own work upon the ship, beaching her regularly for painting, overhauling, and repairs. We lived simply and economically and were

never the worse for it.

All in all, the uncertainty added greatly to the charm of the trip. The spice of having worked for them, made the rewards much greater.

PHOTOGRAPHY

There is no place here for a discussion of photography, but I would like to warn those who may be considering similar trips against the unusual conditions which caused me almost a year of dismal failures.

To begin with, a peculiar quality of the light in the tropics requires more than the usual exposure. This you will ascertain by experiment.

Your films will be ruined by heat and humidity in a short while if they have not come from the manufacturer in individual soldered tins — not merely tins with adhesive tape holding the covers on, or soldered tins with half a dozen rolls inside, but each roll in a soldered tin.

Open a tin only when ready to use the film, and expose it as soon as possible. If it remains in the camera more than a day or so it is in danger of spoiling.

If possible be prepared to develop your films yourself, in which case unless you have ice you will have to use some hardener such as

chrome alum during the developing process to prevent the gelatine on the film from running, due to the high temperature. If you cannot develop them or have them developed within twenty-four hours you will have to repack them along with some hygroscopic material and seal them up, possibly with hot paraffin wax. The hygroscopic material will abstract moisture from the air and will ensure that the film is surrounded by dry air. Dry paper or chemicals are used.

I give no definite instructions because a great deal of research is being done at present and new methods are being discovered. Consult the tropical research department of one of the large film concerns, or the Society of Motion Picture Engineers for the latest developments.

For still photography I tried several cameras and finally found the Leica camera ideally suited to my work. It is a small but beautiful piece of mechanism with the widest range of adaptability of any camera I have owned. The films are five-foot sections of standard motion picture film, compact and relatively inexpensive. They are very easy to develop in broad daylight in a tiny special tank, and will stand enlargement up to almost any size.

